

Sequence Listing - P3230R1C1.txt
Sequence Listing

<110> Eaton,Dan L.
Filvaroff,Ellen
Gerritsen,Mary E.
Goddard,Audrey
Godowski,Paul J.
Grimaldi,Christopher J.
Gurney,Austin L.
Watanabe,Colin K.
Wood,William I.

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ACIDS ENCODING THE SAME

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cattactgca gtaacactcc accatataga cccggcttta cttatatca 250
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			20			25				30				
Val	Thr	Leu	His	His	Ile	Asp	Pro	Ala	Leu	Pro	Tyr	Ile	Ser	Asp
			35			40				45				
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Leu Asn Lys Ala Gly Leu Val Leu Gly Ile Leu Ser Cys Leu Gly
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Leu Ser Ile Val Ala Asn Phe Gln Lys Thr Thr Leu Phe Ala Ala
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His Val Ser Gly Ala Val Leu Thr Phe Gly Met Gly Ser Leu Tyr
125 130 135

Met Phe Val Gln Thr Ile Leu Ser Tyr Gln Met Gln Pro Lys Ile
140 145 150

His Gly Lys Gln Val Phe Trp Ile Arg Leu Leu Leu Val Ile Trp
155 160 165

Cys Gly Val Ser Ala Leu Ser Met Leu Thr Cys Ser Ser Val Leu
170 175 180

His Ser Gly Asn Phe Gly Thr Asp Leu Glu Gln Lys Leu His Trp
185 190 195

Asn Pro Glu Asp Lys Gly Tyr Val Leu His Met Ile Thr Thr Ala
200 205 210

Ala Glu Trp Ser Met Ser Phe Ser Phe Phe Gly Phe Phe Leu Thr
215 220 225

Tyr Ile Arg Asp Phe Gln Lys Ile Ser Leu Arg Val Glu Ala Asn
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			20			25			30					
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			35			40			45					
Val	Thr	Phe	Ala	Phe	Ser	Cys	Thr	Met	Phe	Glu	Leu	Ile	Ile	Phe
			50			55			60					
Glu	Ile	Leu	Gly	Val	Leu	Asn	Ser	Ser	Ser	Arg	Tyr	Phe	His	Trp
			65			70			75					
Lys	Met	Asn	Leu	Cys	Val	Ile	Leu	Leu	Ile	Leu	Val	Phe	Met	Val
			80			85			90					
Pro	Phe	Tyr	Ile	Gly	Tyr	Phe	Ile	Val	Ser	Asn	Ile	Arg	Leu	Leu
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His	Lys	Gln	Arg	Leu	Leu	Phe	Ser	Cys	Leu	Leu	Trp	Leu	Thr	Phe
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Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro Ser
215 220 225

Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr Ser Ala Ser Gly
230 235 240

Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp Ala Leu Glu
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260 265 270

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365 370 375

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gctttgaaac ttgcagctat ggctgggttg gagatggatt cgtggctatc 450

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aaccttaatt tattattaac atacctaaga agtacattgt tacctctata 2250
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ctttttccaa caagaagggga ctgagagatg cagaaatatt tgtgacaaaa 2350
aattaaagca tttagaaaac tt 2372

<210> 6
<211> 322
<212> PRT

Sequence Listing - P3230R1C1.txt

<213> Homo Sapien

<400> 6

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Met Ala Arg Cys Phe Ser Leu Val Leu Leu Thr Ser Ile Trp
 1           5           10          15

Thr Thr Arg Leu Leu Val Gln Gly Ser Leu Arg Ala Glu Glu Leu
      20           25           30

Ser Ile Gln Val Ser Cys Arg Ile Met Gly Ile Thr Leu Val Ser
      35           40           45

Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala
      50           55           60

Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu
      65           70           75

Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val
      80           85           90

Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys
      95           100          105

Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val
      110          115          120

Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp
      125          130          135

Thr Asn Ser Cys Ile Pro Glu Ile Ile Thr Thr Lys Asp Pro Ile
      140          145          150

Phe Asn Thr Gln Thr Ala Thr Gln Thr Thr Glu Phe Ile Val Ser
      155          160          165

Asp Ser Thr Tyr Ser Val Ala Ser Pro Tyr Ser Thr Ile Pro Ala
      170          175          180

Pro Thr Thr Thr Pro Pro Ala Pro Ala Ser Thr Ser Ile Pro Arg
      185          190          195

Arg Lys Lys Leu Ile Cys Val Thr Glu Val Phe Met Glu Thr Ser
      200          205          210

Thr Met Ser Thr Glu Thr Glu Pro Phe Val Glu Asn Lys Ala Ala
      215          220          225

Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu
      230          235          240

Leu Val Leu Ala Leu Leu Phe Phe Gly Ala Ala Ala Gly Leu Gly
      245          250          255

Phe Cys Tyr Val Lys Arg Tyr Val Lys Ala Phe Pro Phe Thr Asn

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Sequence Listing - P3230R1C1.txt

260 265 270

Lys Asn Gln Gln Lys Glu Met Ile Glu Thr Lys Val Val Lys Glu
275 280 285

Glu Lys Ala Asn Asp Ser Asn Pro Asn Glu Glu Ser Lys Lys Thr
290 295 300

Asp Lys Asn Pro Glu Glu Ser Lys Ser Pro Ser Lys Thr Thr Val
305 310 315

Arg Cys Leu Glu Ala Glu Val
320

<210> 7

<211> 2586

<212> DNA

<213> Homo Sapien

<400> 7

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caccgcgagc ccggcggcct cccggcgagg ggcagcagat ccagtccggc 100
ccgcagcgca actcgggtcca gtcggggcg ggcgtgcggg cgcagagcgg 150
agatgcagcg gcttggggcc accctgctgt gcctgctgct ggcgggcgcg 200
gtccccacgg cccccgcgcc cgctccgacg gcgacctcgg ctccagtcaa 250
gcccggcccc gctctcagct acccgagga ggaggccacc ctcaatgaga 300
tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350
agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400
agaagtgaac ctggcaaact tacctcccag ctatcacaat gagaccaaca 450
cagacacgaa ggttggaat aatacatcc atgtgcaccg agaaattcac 500
aagataacca acaaccagac tggacaaatg gtcttttcag agacagttat 550
cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcacatcgc 600
acgaggactg tgggcccgac atgtactgcc agtttgccag cttccagtac 650
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gtgctgtgga gaccagctgt gtgtctgggg tctctgcacc aaaatggcca 750
ccaggggcag caatgggacc atctgtgaca accagagggg ctgccagccg 800
gggctgtgct gtgccttcca gagaggcctg ctgttcctg tgtgcacacc 850
cctgcccgtg gagggcgagc ttgcatga ccccgccagc cggcttctgg 900

Sequence Listing - P3230R1C1.txt

acctcatcac ctgggagcta gagcctgatg gagccttgga ccgatgccct 950
tgtgccagtg gcctcctctg ccagccccac agccacagcc tgggtgatgt 1000
gtgcaagccg accttcgtgg ggagccgtga ccaagatggg gagatcctgc 1050
tgcccagaga ggtccccgat gagtatgaag ttggcagctt catggaggag 1100
gtgcgccagg agctggagga cctggagagg agcctgactg aagagatggc 1150
gctgggggag cctgcggctg ccgccgctgc actgctggga ggggaagaga 1200
tttagatctg gaccaggctg tgggtagatg tgcaatagaa atagctaatt 1250
tatttcccca ggtgtgtgct ttaggcgtgg gctgaccagg ctctctcta 1300
catctcttc ccagtaagtt tcccctctgg cttgacagca tgagggtgtg 1350
tgcatttggt cagctcccc aggctgttct ccaggcttca cagtctggtg 1400
cttgggagag tcaggcaggg ttaaactgca ggagcagttt gccaccctg 1450
tccagattat tggctgcttt gcctctacca gttggcagac agccgtttgt 1500
tctacatggc ttgataatt gtttgagggg aggagatgga aacaatgtgg 1550
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tgcaaacatc aacctggcaa aaatgcaaca aatgaatttt ccacgcagtt 1650
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tctctcagca cagcctgggg aggggggtcat tgttctctc gtccatcagg 1850
gatctcagag gctcagagac tgcaagctgc ttgcccaagt cacacagcta 1900
gtgaagacca gagcagtttc atctggttgt gactctaagc tcagtgtctt 1950
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gaaggagaat gggatttttc ttgaggcatg cacatctgga attaaggtca 2050
aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100
gttctcacag tgtggggcag ccgtccttct aatgaagaca atgatattga 2150
cactgtccct ctttggcagt tgcattagta actttgaaag gtatatgact 2200
gagcgtagca tacagggttaa cctgcagaaa cagtacttag gtaattgtag 2250

Sequence Listing - P3230R1C1.txt

ggcgaggatt ataatgaaa ttgcaaat cacttagcag caactgaaga 2300
caattatcaa ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac 2350
atgggtgttaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400
tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450
tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500
tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550
cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 8

<211> 350

<212> PRT

<213> Homo Sapien

<400> 8

Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala
1 5 10 15

Ala Val Pro Thr Ala Pro Ala Pro Thr Ala Thr Ser Ala
20 25 30

Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala
35 40 45

Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp
50 55 60

Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu
65 70 75

Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu
80 85 90

Pro Pro Ser Tyr His Asn Glu Thr Asn Thr Asp Thr Lys Val Gly
95 100 105

Asn Asn Thr Ile His Val His Arg Glu Ile His Lys Ile Thr Asn
110 115 120

Asn Gln Thr Gly Gln Met Val Phe Ser Glu Thr Val Ile Thr Ser
125 130 135

Val Gly Asp Glu Glu Gly Arg Arg Ser His Glu Cys Ile Ile Asp
140 145 150

Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln Phe Ala Ser Phe Gln
155 160 165

Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met Leu Cys Thr Arg
170 175 180

Sequence Listing - P3230R1C1.txt

Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp Gly His Cys
 185 190 195
 Thr Lys Met Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys Asp Asn
 200 205 210
 Gln Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg Gly
 215 220 225
 Leu Leu Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu
 230 235 240
 Cys His Asp Pro Ala Ser Arg Leu Leu Asp Leu Ile Thr Trp Glu
 245 250 255
 Leu Glu Pro Asp Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly
 260 265 270
 Leu Leu Cys Gln Pro His Ser His Ser Leu Val Tyr Val Cys Lys
 275 280 285
 Pro Thr Phe Val Gly Ser Arg Asp Gln Asp Gly Glu Ile Leu Leu
 290 295 300
 Pro Arg Glu Val Pro Asp Glu Tyr Glu Val Gly Ser Phe Met Glu
 305 310 315
 Glu Val Arg Gln Glu Leu Glu Asp Leu Glu Arg Ser Leu Thr Glu
 320 325 330
 Glu Met Ala Leu Gly Glu Pro Ala Ala Ala Ala Ala Leu Leu
 335 340 345
 Gly Gly Glu Glu Ile
 350

<210> 9

<211> 1395

<212> DNA

<213> Homo Sapien

<400> 9

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 atcatgcaac cccacggccc acctgtgaa ctctcgtgc ccagggctga 100
 tgtgcgtctt ccagggtac tcaccaaag gcctaacca acgttctgtc 150
 ttcaatctgc aaatctatgg ggtcctggg ctcttctgga cccttaactg 200
 ggtactggcc ctgggccaat gcgtcctgc tggagccttt gcctccttct 250
 actgggcctt ccacaagccc caggacatcc ctacctccc cttaatctct 300

Sequence Listing - P3230R1C1.txt

gccttcatcc gcacactccg ttaccacact gggtcattgg catttgagc 350
cctcatcctg acccttgtgc agatagcccg ggtcatcttg gagtatattg 400
accacaagct cagaggagtg cagaaccctg tagcccgctg catcatgtgc 450
tgtttcaagt gctgcctctg gtgtctggaa aaatttatca agttcctaaa 500
ccgcaatgca tacatcatga tcgcatcta cggaagaat ttctgtgtct 550
cagccaaaaa tgcgttcattg ctactcatgc gaaacattgt cagggtgggc 600
gtcctggaca aagtcacaga cctgctgctg ttctttggga agctgctggt 650
ggtcggaggc gtgggggtcc tgtccttctt tttttctcc ggtcgcatcc 700
cggggctggg taaagacttt aagagccccc acctcaacta ttactggctg 750
cccatcatga cctccatcct gggggcctat gtcatcgcca gcggcttctt 800
cagcgttttc ggcatgtgtg tggacacgct cttcctctgc ttctggaag 850
acctggagcg gaacaacggc tccttgacc ggcctacta catgtccaag 900
agccttctaa agattctggg caagaagaac gaggcgcccc cggacaacaa 950
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cccaccgtcc agccatccaa cctcacttcg cttacaggt ctccattttg 1050
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acatttgag aggctgaggc gggcggatca cctgagtcag gagttcgaga 1150
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gatcgcgcca ctgcactcca acctgggtga cagactctgt ctccaaaaca 1350
aaacaaacaa acaaaaagat ttatttaaag atattttgtt aactc 1395

<210> 10

<211> 321

<212> PRT

<213> Homo Sapien

<400> 10

Arg	Thr	Arg	Gly	Arg	Thr	Arg	Gly	Gly	Cys	Glu	Lys	Val	Pro	Ile
1			5			10			15					

Asn	Thr	Ser	Cys	Asn	Pro	Thr	Ala	His	Leu	Val	Asn	Ser	Ser	Cys
		20				25			30					

Sequence Listing - P3230R1C1.txt

Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu
35 40 45

Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
50 55 60

Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
65 70 75

Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro
80 85 90

Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr
95 100 105

Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu
110 115 120

Thr Leu Val Gln Ile Ala Arg Val Ile Leu Glu Tyr Ile Asp His
125 130 135

Lys Leu Arg Gly Val Gln Asn Pro Val Ala Arg Cys Ile Met Cys
140 145 150

Cys Phe Lys Cys Cys Leu Trp Cys Leu Glu Lys Phe Ile Lys Phe
155 160 165

Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Lys Asn
170 175 180

Phe Cys Val Ser Ala Lys Asn Ala Phe Met Leu Leu Met Arg Asn
185 190 195

Ile Val Arg Val Val Val Leu Asp Lys Val Thr Asp Leu Leu Leu
200 205 210

Phe Phe Gly Lys Leu Leu Val Val Gly Gly Val Gly Val Leu Ser
215 220 225

Phe Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu Gly Lys Asp Phe
230 235 240

Lys Ser Pro His Leu Asn Tyr Tyr Trp Leu Pro Ile Met Thr Ser
245 250 255

Ile Leu Gly Ala Tyr Val Ile Ala Ser Gly Phe Phe Ser Val Phe
260 265 270

Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe Leu Glu Asp Leu
275 280 285

Glu Arg Asn Asn Gly Ser Leu Asp Arg Pro Tyr Tyr Met Ser Lys
290 295 300

Ser Leu Leu Lys Ile Leu Gly Lys Lys Asn Glu Ala Pro Pro Asp

Sequence Listing - P3230R1C1.txt

305

310

315

Asn Lys Lys Arg Lys Lys
320

<210> 11

<211> 1901

<212> DNA

<213> Homo Sapien

<400> 11

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gcctgcctgg gagcctgctc cctgctcagc tgcgcgtcct gcctctgcgg 100

ctctgcccc tgcatctgt gcagctgctg ccccgccagc cgcaactcca 150

ccgtgagccg cctcatcttc acgttcttcc tcttctggg ggtgctggtg 200

tccatcatta tgctgagccc gggcggtggag agtcagctct acaagctgcc 250

ctgggtgtgt gaggaggggg ccgggatccc caccgtcctg cagggccaca 300

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gccacggcgg cttcttctt cttcttttc accctgctca tgctctgcgt 400

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cctttcatc ctcatccagc tgggtgctgt catcgacttt gcgcactcct 600

ggaaccagcg gtggctgggc aaggccgagg agtgcgattc ccgtgcctgg 650

tacgcaggcc tcttcttctt cactctctc ttctacttgc tgcgatcgc 700

ggccgtggcg ctgatgttca tgtactacac tgagcccagc ggctgccacg 750

agggcaaggt cttcatcagc ctcaacctca cttctgtgt ctgcgtgtcc 800

atcgctgctg tctgccccaa ggtccaggac gccagccca actcgggtct 850

gctgcaggcc tcggatcatca ccctctacac catgtttgtc acctggtcag 900

ccctatccag tatccctgaa cagaaatgca accccattt gccaacccag 950

ctgggcaacg agacagttgt ggcaggcccc gagggctatg agaccagtg 1000

gtgggatgcc ccgagcattg tgggcctcat catcttctc ctgtgcaccc 1050

tcttcatcag tctgcgtccc tcagaccacc ggcagggtgaa cagcctgatg 1100

cagaccgagg agtgcccacc tatgctagac gccacacagc agcagcagca 1150

Sequence Listing - P3230R1C1.txt

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 tcacctacag ctactccttc ttccacttct gcctggtgct ggcctcactg 1250
 cacgtcatga tgacgctcac caactggtac aagcccgggtg agaccgggaa 1300
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 aaccgcgact tcagctgagg cagcctcaca gcctgccatc tggcgcctcc 1450
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 caccaatcag ccaggctgag cccccacccc tgccccagct ccaggacctg 1550
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 caggctcctg cagagcccca tcccccgcc acaccacac ggtggagctg 1650
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 agggctccct tgcctcagg ctcacggga gcggggctgc tggagagagc 1750
 ggggaactcc caccacagtg gggcatccgg cactgaagcc ctggtgttcc 1800
 tggtcacgtc cccagggga cctgcccc ttctggact tcgtgcctta 1850
 ctgagtctct aagactttt ctaataaaca agccagtgcg tgtaaaaaaa 1900
 a 1901

<210> 12

<211> 457

<212> PRT

<213> Homo Sapien

<400> 12

Met Gly Ala Cys Leu Gly Ala Cys Ser Leu Leu Ser Cys Ala Ser
 1 5 10 15

Cys Leu Cys Gly Ser Ala Pro Cys Ile Leu Cys Ser Cys Cys Pro
 20 25 30

Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe
 35 40 45

Leu Phe Leu Gly Val Leu Val Ser Ile Ile Met Leu Ser Pro Gly
 50 55 60

Val Glu Ser Gln Leu Tyr Lys Leu Pro Trp Val Cys Glu Glu Gly
 65 70 75

Ala Gly Ile Pro Thr Val Leu Gln Gly His Ile Asp Cys Gly Ser

Sequence Listing - P3230R1C1.txt

80	85	90
Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys Phe Ala Thr Ala		
95	100	105
Ala Phe Phe Phe Phe Phe Phe Thr Leu Leu Met Leu Cys Val Ser		
110	115	120
Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp Phe		
125	130	135
Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr		
140	145	150
Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val		
155	160	165
Val Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile		
170	175	180
Asp Phe Ala His Ser Trp Asn Gln Arg Trp Leu Gly Lys Ala Glu		
185	190	195
Glu Cys Asp Ser Arg Ala Trp Tyr Ala Gly Leu Phe Phe Phe Thr		
200	205	210
Leu Leu Phe Tyr Leu Leu Ser Ile Ala Ala Val Ala Leu Met Phe		
215	220	225
Met Tyr Tyr Thr Glu Pro Ser Gly Cys His Glu Gly Lys Val Phe		
230	235	240
Ile Ser Leu Asn Leu Thr Phe Cys Val Cys Val Ser Ile Ala Ala		
245	250	255
Val Leu Pro Lys Val Gln Asp Ala Gln Pro Asn Ser Gly Leu Leu		
260	265	270
Gln Ala Ser Val Ile Thr Leu Tyr Thr Met Phe Val Thr Trp Ser		
275	280	285
Ala Leu Ser Ser Ile Pro Glu Gln Lys Cys Asn Pro His Leu Pro		
290	295	300
Thr Gln Leu Gly Asn Glu Thr Val Val Ala Gly Pro Glu Gly Tyr		
305	310	315
Glu Thr Gln Trp Trp Asp Ala Pro Ser Ile Val Gly Leu Ile Ile		
320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser Ser Asp His		
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro Pro Met		
350	355	360

Sequence Listing - P3230R1C1.txt

Leu Asp Ala Thr Gln Gln Gln Gln Gln Val Ala Ala Cys Glu
365 370 375

Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr
380 385 390

Ser Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met
395 400 405

Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met
410 415 420

Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp
425 430 435

Ala Gly Leu Leu Leu Tyr Leu Trp Thr Leu Val Ala Pro Leu Leu
440 445 450

Leu Arg Asn Arg Asp Phe Ser
455

<210> 13

<211> 1572

<212> DNA

<213> Homo Sapien

<400> 13

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tgaaccacct gccagaagac atggagaacg ctctaccgg gagccagagc 150

tcccatgctt ctctgcgcaa tatccattcc atcaaccca cacaactcat 200

ggccaggatt gagtctatg aaggaagga aaagaaaggc atatctgatg 250

tcaggaggac tttctgtttg ttgtcacct ttgacctctt attcgtaaca 300

ttactgtgga taatagagtt aaatgtgaat ggaggcattg agaacacatt 350

agagaaggag gtgatgcagt atgactacta ttctcatat ttgatatat 400

ttcttctggc agtttttcga tttaaagtgt taatacttgc atagctgtg 450

tgcagactgc gccattggtg ggcaatagcg ttgacaacgg cagtgaccag 500

tgccctttta ctagcaaaag tgatccttgc gaagcttttc tctcaagggg 550

cttttgcta tgtgctgcc atcatttcat tcaccttgc ctggattgag 600

acgtgggtcc tggatttcaa agtgttacct caagaagcag aagaagaaaa 650

cagactcctg atagttcagg atgcttcaga gagggcagca cttatacctg 700

Sequence Listing - P3230R1C1.txt

gtggtctttc tgatggtcag tttattccc ctctgaatc cgaagcagga 750
 tctgaagaag ctgaagaaaa acaggacagt gagaaccac ttttagaact 800
 atgagtacta cttttgttaa atgtgaaaaa ccctcacaga aagtcacga 850
 ggcaaaaaga ggcaggcagt ggagtctccc tgtcgacagt aaagttgaaa 900
 tggtgacgtc cactgctggc ttattgaac agctaataaa gatttattha 950
 ttgtaatacc tcacaaacgt tgtaccatat ccatgcacat ttagttgcct 1000
 gcctgtggct ggtaaggtaa tgtcatgatt catcctctct tcagtgagac 1050
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 taatcaaaag acttaataata ttgaagtaac acttttttag taagcaagat 1150
 acctttttat ttcaattcac agaattggaat tttttgttt catgtctcag 1200
 atttatttg tatttctttt ttaacactct acatttcct tgttttttaa 1250
 ctcatgcaca tgtgctcttt gtacagtttt aaaaagtgtg ataaaatctg 1300
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 gtaaaatgtc accagacatt tgtattattt ttatcatgaa atcatgtttt 1450
 tctctgattg ttctgaaatg ttctaaatac tcttatttg aatgcacaaa 1500
 atgacttaaa ccattcatat catgtttcct ttgcgttcag ccaatttcaa 1550
 ttaaaatgaa ctaaattaaa aa 1572

<210> 14

<211> 234

<212> PRT

<213> Homo Sapien

<400> 14

Met	Asn	His	Leu	Pro	Glu	Asp	Met	Glu	Asn	Ala	Leu	Thr	Gly	Ser
1			5			10			15					

Gln	Ser	Ser	His	Ala	Ser	Leu	Arg	Asn	Ile	His	Ser	Ile	Asn	Pro
			20			25			30					

Thr	Gln	Leu	Met	Ala	Arg	Ile	Glu	Ser	Tyr	Glu	Gly	Arg	Glu	Lys
		35			40				45					

Lys	Gly	Ile	Ser	Asp	Val	Arg	Arg	Thr	Phe	Cys	Leu	Phe	Val	Thr
		50			55				60					

Phe	Asp	Leu	Leu	Phe	Val	Thr	Leu	Leu	Trp	Ile	Ile	Glu	Leu	Asn
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Sequence Listing - P3230R1C1.txt

65	70	75
Val Asn Gly Gly Ile Glu Asn Thr Leu Glu Lys Glu Val Met Gln		
80	85	90
Tyr Asp Tyr Tyr Ser Ser Tyr Phe Asp Ile Phe Leu Leu Ala Val		
95	100	105
Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu		
110	115	120
Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala		
125	130	135
Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly		
140	145	150
Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp		
155	160	165
Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala		
170	175	180
Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg		
185	190	195
Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser		
200	205	210
Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln		
215	220	225
Asp Ser Glu Lys Pro Leu Leu Glu Leu		
230		

<210> 15

<211> 2768

<212> DNA

<213> Homo Sapien

<400> 15

actcgaacgc agttgcttcg ggaccagga cccctcggg cccgaccgc 50

caggaaagac tgaggccgcg gcctgccccg cccggctccc tgcgccgccg 100

ccgcctcccg ggacagaaga tgtgtccag ggtccctctg ctgctgccgc 150

tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200

tgccagtga gccagccaca gacagtcttc tgactgcc gccaggggac 250

cacggtgccc cgagacgtgc caccgacac ggtggggctg tacgtctttg 300

agaacggcat caccatgctc gacgcaggca gctttgccgg cctgccgggc 350

Sequence Listing - P3230R1C1.txt

ctgcagctcc tggacctgtc acagaaccag atcgccagcc tgcccagcgg 400
ggctttccag ccactcgcca acctcagcaa cctggacctg acggccaaca 450
ggctgcatga aatcaccaat gagaccttcc gtggcctgcg gcgcctcgag 500
cgcctctacc tgggcaagaa ccgcatccgc cacatccagc ctggtgcctt 550
cgacacgctc gaccgcctcc tggagctcaa gctgcaggac aacgagctgc 600
gggcactgcc cccgctgcgc ctgccccgcc tgctgctgct ggacctcagc 650
cacaacagcc tcctggccct ggagcccggc atcctggaca ctgccaacgt 700
ggaggcgctg cggctggctg gtctggggct gcagcagctg gacgaggggc 750
tcttcagccg ctgcgcaac ctccagacc tggatgtgtc cgacaaccag 800
ctggagcgag tgccacctgt gatccgaggc ctccggggcc tgacgcgcct 850
gcggctggcc ggcaacacc gcattgccca gctgcggccc gaggacctgg 900
ccggcctggc tgccctgcag gagctggatg tgagcaacct aagcctgcag 950
gccctgctg gcgaccttc gggcctttc ccccgctgc ggctgctggc 1000
agtgcccg cacccttca actgcgtgtg cccctgagc tggtttgcc 1050
cctgggtgcg cgagagccac gtcacactgg ccagccctga ggagacgcgc 1100
tgccacttcc cgccaagaa cgctggccgg ctgctcctgg agcttgacta 1150
cgccgacttt ggctgccag ccaccaccac cacagccaca gtgccacca 1200
cgaggccgt ggtgcgggag ccacagcct tgtttctag ctggctcct 1250
acctggctta gcccacagc gccggccact gaggcccca gccgcctc 1300
cactgcccc cagactgtag ggctgtccc ccagccccag gactgccac 1350
cgtccactg cctcaatggg ggcacatgcc acctggggac acggcaccac 1400
ctggcgtgct tgtgccccga aggcttcag ggctgtact gtgagagcca 1450
gatggggcag gggacacggc ccagccctac accagtcacg ccgaggccac 1500
cacggtccct gacctgggc atcgagccgg tgagcccccac ctccctgcgc 1550
gtggggctgc agcgctacct ccaggggagc tccgtgcagc tcaggagcct 1600
ccgtctcacc tatcgcaacc tatcgggcc tgataagcgg ctggtgacgc 1650
tgcgactgcc tgctcgctc gctgagtaca cggtcacca gctgcggccc 1700
aacgccactt actccgtctg tgtcatgcct ttggggcccc ggcgggtgcc 1750

Sequence Listing - P3230R1C1.txt

ggagggcgag gaggcctgcg gggaggccca tacaccccca gccgtccact 1800
 ccaaccacgc ccagtcacc caggcccgcg agggcaacct gccgtcctc 1850
 attgcgcccc ccctggccgc ggtgctcctg gccgcgctgg ctgcggtggg 1900
 ggcagcctac tgtgtgcggc gggggcgggc catggcagca gcggctcagg 1950
 acaaagggca ggtggggcca ggggctgggc ccctggaact ggagggagtg 2000
 aagggtccct tggagccagg cccgaaggca acagagggcg gtggagaggc 2050
 cctgccacgc gggctgagt gtgaggtgcc actcatgggc ttcccagggc 2100
 ctggcctcca gtcacccctc cagcaaagc cctacatcta agccagagag 2150
 agacagggca gctggggccg ggctctcagc cagtgagatg gccagcccc 2200
 tcctgctgcc acaccacgta agttctcagt cccaacctcg gggatgtgtg 2250
 cagacagggc tgtgtgacca cagctgggcc ctgtccctc tggacctcg 2300
 tctctcatc tgtgagatgc tgtggcccag ctgacgagcc ctaacgtccc 2350
 cagaaccgag tgcctatgag gacagtgtcc gccctgccct ccgcaacgtg 2400
 cagtccttg gcacggcggg ccctgccatg tgctggtaac gcatgcctgg 2450
 gtctgctgg gctctccac tccaggcgga ccctgggggc cagtgaagga 2500
 agtcccggga aagagcagag ggagagcggg taggcggctg tgtgactcta 2550
 gtcttgccc caggaagcga aggaacaaaa gaaactggaa aggaagatgc 2600
 tttaggaaca tgtttgctt ttttaaata tatatatta taagagatcc 2650
 tttccattt attctggga gatgttttc aaactcagag acaaggactt 2700
 tggttttgt aagacaaacg atgatatgaa ggcctttgt aagaaaaat 2750
 aaaagatgaa gtgtgaaa 2768

<210> 16

<211> 673

<212> PRT

<213> Homo Sapien

<400> 16

Met	Cys	Ser	Arg	Val	Pro	Leu	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu
1		5				10				15				

Ala	Leu	Gly	Pro	Gly	Val	Gln	Gly	Cys	Pro	Ser	Gly	Cys	Gln	Cys
		20				25				30				

Sequence Listing - P3230R1C1.txt

Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
35 40 45

Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
50 55 60

Glu Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu
65 70 75

Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
80 85 90

Leu Pro Ser Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu
95 100 105

Asp Leu Thr Ala Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe
110 115 120

Arg Gly Leu Arg Arg Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg
125 130 135

Ile Arg His Ile Gln Pro Gly Ala Phe Asp Thr Leu Asp Arg Leu
140 145 150

Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu Arg Ala Leu Pro Pro
155 160 165

Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser
170 175 180

Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu
185 190 195

Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly
200 205 210

Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp
215 220 225

Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly
230 235 240

Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu
245 250 255

Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp
260 265 270

Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly
275 280 285

Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe
290 295 300

Asn Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu

Sequence Listing - P3230R1C1.txt

305	310	315
Ser His Val Thr Leu Ala	Ser Pro Glu Glu Thr Arg Cys His Phe	
320	325	330
Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala		
335	340	345
Asp Phe Gly Cys Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr		
350	355	360
Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu		
365	370	375
Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro		
380	385	390
Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln		
395	400	405
Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys		
410	415	420
His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly		
425	430	435
Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg		
440	445	450
Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr		
455	460	465
Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu		
470	475	480
Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg		
485	490	495
Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr		
500	505	510
Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu		
515	520	525
Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro		
530	535	540
Gly Arg Val Pro Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr		
545	550	555
Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg		
560	565	570
Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val		
575	580	585

Sequence Listing - P3230R1C1.txt

Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg
590 595 600

Arg Gly Arg Ala Met Ala Ala Ala Ala Gln Asp Lys Gly Gln Val
605 610 615

Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro
620 625 630

Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu
635 640 645

Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly
650 655 660

Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile
665 670

<210> 17

<211> 1672

<212> DNA

<213> Homo Sapien

<400> 17

gcagcggcga ggcggcggtg gtggctgagt ccgtggtggc agaggcgaag 50

gcgacagctc atgcgggtcc ggatagggct gacgctgctg ctgtgtgcgg 100

tgctgctgag cttggcctcg gcgtcctcgg atgaagaagg cagccaggat 150

gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200

ccatactact gcaggcagag tagttgctgg tcaaataattt cttgattcag 250

aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300

agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350

aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaccag 400

cttgaccgc cattgaaggc acagcacatg gggagccctg ccacttcct 450

tttcttttcc tagataagga gtatgatgaa tgtacatcag atgggaggga 500

agatggcaga ctgtggtgtg ctacaaccta tgactacaaa gcagatgaaa 550

agtggggctt ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600

caggaagcag aaatgatgta tcaactgga atgaaaatcc ttaatggaag 650

caataagaaa agccaaaaaa gagaagcata tcggtatctc caaaaggcag 700

caagcatgaa ccataccaaa gccctggaga gagtgtcata tgctctttta 750

tttggtgatt acttgccaca gaatatccag gcagcgagag agatgtttga 800

Sequence Listing - P3230R1C1.txt

gaagctgact gaggaaggct ctccaaggg acagactgct cttggcttc 850
 tgtatgcctc tggacttggg gttaattcaa gtcaggcaaa ggctcttgta 900
 tattatacat ttggagctct tgggggcaat ctaatagccc acatggtttt 950
 ggtaagtaga ctttagtgga aggctaataa tattaacatc agaagaattt 1000
 gtggtttata gcggccacaa cttttcagc tttcatgac cagatttgct 1050
 tgtattaaga ccaaatattc agttgaactt cttcaaatt cttgtaatg 1100
 gatataacac atggaatcta catgtaaag aaagttggg gagtccacaa 1150
 tttttctta aaatgattag ttggctgat tgcccctaaa aagagagatc 1200
 tgataaatgg ctcttttaa attttctctg agttggaatt gtcagaatca 1250
 tttttacat tagattatca taattttaa aattttctt tagttttca 1300
 aaatttgta aatgggtggc atagaaaaac aacatgaaat attatacaat 1350
 attttgcaac aatgccctaa gaattgttaa aattcatgga gttatttg 1400
 cagaatgact ccagagagct ctactttctg tttttactt ttcattgattg 1450
 gctgtcttcc cattattct ggtcatttat tgctagtac actgtgcctg 1500
 cttccagtag tctattttc cctattttgc taatttgta cttttcttt 1550
 gctaatttg aagattaact catttttaaa aaaattatgt ctaagattaa 1600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18
 <211> 301
 <212> PRT
 <213> Homo Sapien

<400> 18
 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Cys Ala Val Leu
 1 5 10 15
 Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp
 20 25 30
 Glu Ser Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val
 35 40 45
 Lys Asp His Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe
 50 55 60
 Leu Asp Ser Glu Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu

Sequence Listing - P3230R1C1.txt

65	70	75
Glu Asp Ser Leu Lys Ser Gln Glu Gly Glu Ser Val Thr Glu Asp		
80	85	90
Ile Ser Phe Leu Glu Ser Pro Asn Pro Glu Asn Lys Asp Tyr Glu		
95	100	105
Glu Pro Lys Lys Val Arg Lys Pro Ala Leu Thr Ala Ile Glu Gly		
110	115	120
Thr Ala His Gly Glu Pro Cys His Phe Pro Phe Leu Phe Leu Asp		
125	130	135
Lys Glu Tyr Asp Glu Cys Thr Ser Asp Gly Arg Glu Asp Gly Arg		
140	145	150
Leu Trp Cys Ala Thr Thr Tyr Asp Tyr Lys Ala Asp Glu Lys Trp		
155	160	165
Gly Phe Cys Glu Thr Glu Glu Glu Ala Ala Lys Arg Arg Gln Met		
170	175	180
Gln Glu Ala Glu Met Met Tyr Gln Thr Gly Met Lys Ile Leu Asn		
185	190	195
Gly Ser Asn Lys Lys Ser Gln Lys Arg Glu Ala Tyr Arg Tyr Leu		
200	205	210
Gln Lys Ala Ala Ser Met Asn His Thr Lys Ala Leu Glu Arg Val		
215	220	225
Ser Tyr Ala Leu Leu Phe Gly Asp Tyr Leu Pro Gln Asn Ile Gln		
230	235	240
Ala Ala Arg Glu Met Phe Glu Lys Leu Thr Glu Glu Gly Ser Pro		
245	250	255
Lys Gly Gln Thr Ala Leu Gly Phe Leu Tyr Ala Ser Gly Leu Gly		
260	265	270
Val Asn Ser Ser Gln Ala Lys Ala Leu Val Tyr Tyr Thr Phe Gly		
275	280	285
Ala Leu Gly Gly Asn Leu Ile Ala His Met Val Leu Val Ser Arg		
290	295	300

Leu

<210> 19
 <211> 1508
 <212> DNA
 <213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 19

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ggacaccatc ttcttgatt atacaagaaa ggagtgtacc tatcacacac 100
agggggaaaa atgctctttt gggtgctagg cctcctaadc ctctgtgggt 150
ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
tacatttta tcaactgatg tgactcgggc ttggaaact tggcagccag 250
aacttttgat aaaaagggat ttcattgaat cgctgcctgt ctgactgaat 300
caggatcaac agctttaaag gcagaaacct cagagagact tcgtactgtg 350
cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
gaagaaccaa gttggggaga aaggtctctg gggctctgac aataatgtg 450
gtgttcccgg cgtgctggct cccactgact ggctgacact agaggactac 500
agagaaccta ttgaagtga cctgtttgga ctcatcagtg tgacactaaa 550
tatgcttctt ttggtcaaga aagctcaagg gagagttatt aatgtctcca 600
gtgttgaggg tcgccttgca atcgttgagg ggggctatac tccatccaaa 650
tatgcagtgg aaggtttcaa tgacagctta agacgggaca tgaaagcttt 700
tggtgtgcac gtctcatgca ttgaaccagg attgttcaa acaaacttgg 750
cagatccagt aaaggtaatt gaaaaaaaaac tcgccatttg ggagcagctg 800
tctccagaca tcaaacaaca atatggagaa ggttacattg aaaaaagtct 850
agacaaactg aaaggcaata aatcctatgt gaacatggac ctctctccgg 900
tggtagagtg catggaccac gctctaaca gtctcttccc taagactcat 950
tatgccgctg gaaaagatgc caaaatttc ttgatacctc tgtctcacat 1000
gccagcagct ttgcaagact ttttattgtt gaaacagaaa gcagagctgg 1050
ctaaccctaa ggcagtgtga ctgagctaac cacaatgtc tctccaggc 1100
tatgaaattg gccgatttca agaacacatc tccttttcaa cccattcct 1150
tatctgctcc aacctggact catttagatc gtgcttattt ggattgcaaa 1200
agggagtccc accatcgctg gtggtatccc agggtccttg ctcaagtttt 1250
ctttgaaaag gagggctgga atggtacatc acataggcaa gtcctgcctt 1300
gtatttaggc ttgcctgct ttggtgtgat taagggaat tgaaagactt 1350

Sequence Listing - P3230R1C1.txt

gcccattcaa aatgatcttt accgtggcct gcccctatgct tatggtcccc 1400

agcatttaca gtaacttggt aatgtaagt atcatctctt atctaaatat 1450

taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500

aaaaaaaa 1508

<210> 20

<211> 319

<212> PRT

<213> Homo Sapien

<400> 20

Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu
1 5 10 15

Trp Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys
20 25 30

Tyr Ile Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala
35 40 45

Ala Arg Thr Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys
50 55 60

Leu Thr Glu Ser Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu
65 70 75

Arg Leu Arg Thr Val Leu Leu Asp Val Thr Asp Pro Glu Asn Val
80 85 90

Lys Arg Thr Ala Gln Trp Val Lys Asn Gln Val Gly Glu Lys Gly
95 100 105

Leu Trp Gly Leu Ile Asn Asn Ala Gly Val Pro Gly Val Leu Ala
110 115 120

Pro Thr Asp Trp Leu Thr Leu Glu Asp Tyr Arg Glu Pro Ile Glu
125 130 135

Val Asn Leu Phe Gly Leu Ile Ser Val Thr Leu Asn Met Leu Pro
140 145 150

Leu Val Lys Lys Ala Gln Gly Arg Val Ile Asn Val Ser Ser Val
155 160 165

Gly Gly Arg Leu Ala Ile Val Gly Gly Gly Tyr Thr Pro Ser Lys
170 175 180

Tyr Ala Val Glu Gly Phe Asn Asp Ser Leu Arg Arg Asp Met Lys
185 190 195

Ala Phe Gly Val His Val Ser Cys Ile Glu Pro Gly Leu Phe Lys
200 205 210

Sequence Listing - P3230R1C1.txt

Thr Asn Leu Ala Asp Pro Val Lys Val Ile Glu Lys Lys Leu Ala
 215 220 225
 Ile Trp Glu Gln Leu Ser Pro Asp Ile Lys Gln Gln Tyr Gly Glu
 230 235 240
 Gly Tyr Ile Glu Lys Ser Leu Asp Lys Leu Lys Gly Asn Lys Ser
 245 250 255
 Tyr Val Asn Met Asp Leu Ser Pro Val Val Glu Cys Met Asp His
 260 265 270
 Ala Leu Thr Ser Leu Phe Pro Lys Thr His Tyr Ala Ala Gly Lys
 275 280 285
 Asp Ala Lys Ile Phe Trp Ile Pro Leu Ser His Met Pro Ala Ala
 290 295 300
 Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn
 305 310 315
 Pro Lys Ala Val

<210> 21

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 21

ctgaggcggc ggtagcatgg agggggagag tacgtcggcg gtgctctcgg 50
 gctttgtgct cggcgcactc gctttccagc acctcaacac ggactcggac 100
 acggaagggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
 tactgattcc caaatggatg atgttgaagt tgttataca attgacattc 200
 agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
 gaagtaaag agcaagcact gaagaaaata ttatcaaatg tcaaaaagaa 300
 tgtggtaggt tggtaacaaat tccgtcgtca ttcagatcag atcatgacgt 350
 ttagagagag gctgcttcac aaaaacttgc aggagcattt ttcaaaccaa 400
 gaccttgttt ttctgctatt aacaccaagt ataataacag aaagctgctc 450
 tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
 acagggtacc tttagtggtt gccaatctgg gcatgtctga acaactgggt 550
 tataaaactg tatcagggtc ctgtatgtcc actgggttta gccgagcagt 600

Sequence Listing - P3230R1C1.txt

acaaacacac agctctaaat ttttgaaga agatggatcc ttaaaggagg 650
tacataagat aatgaaatg tatgcttcat tacaagagga attaaagagt 700
atatgcaaaa aagtggaaga cagtgaacaa gcagtagata aactagtaaa 750
ggatgtaaac agattaaaac gagaaattga gaaaaggaga ggagcacaga 800
ttcaggcagc aagagagaag aacatccaaa aagaccctca ggagaacatt 850
tttctttgtc aggcattacg gacctttttt ccaaattctg aatttcttca 900
ttcatgtgtt atgtctttaa aaaatagaca tgtttctaaa agtagctgta 950
actacaacca ccactcgat gtagtagaca atctgacctt aatggtagaa 1000
cacactgaca ttctgaagc tagtcagct agtacaccac aatcattaa 1050
gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcgg 1100
tgtagatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
caagataaag catccaaat gagcagccca gaaacagatg aagaaattga 1200
aaagatgaag ggttttggtg aatattcacg gtctcctaca tttgatcct 1250
tttaacctta caaggagatt tttttattg gctgatgggt aaagccaaac 1300
atttctattg ttttactat gttgagctac ttgcagtaag ttcatttgtt 1350
tttactatgt tcacctgttt gcagtaatac acagataact ctagtgcatt 1400
ttacttcaca aagtactttt tcaaacatca gatgctttta tttccaaacc 1450
ttttttcac ctttactaa gttgttgagg ggaaggctta cacagacaca 1500
ttctttagaa ttgaaaagt gagaccaggc acagtggctc acacctgtaa 1550
tcccagcact tagggaagac aagtcaggag gattgattga agctaggagt 1600
tagagaccag cctgggcaac gtattgagac catgtctatt aaaaaataaa 1650
atggaaaagc aagaatagcc ttattttcaa aatatggaaa gaaatttata 1700
tgaaaattta tctgagtcatt taaaattctc ctttaagtgt acttttttag 1750
aagtacatta tggctagagt tgccagataa aatgctggat atcatgcaat 1800
aaatttgcaa aacatcatct aaaatttaaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 22

<211> 409

<212> PRT

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 22

Met Glu Gly Glu Ser Thr Ser Ala Val Leu Ser Gly Phe Val Leu
1 5 10 15

Gly Ala Leu Ala Phe Gln His Leu Asn Thr Asp Ser Asp Thr Glu
20 25 30

Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
35 40 45

Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
50 55 60

Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
65 70 75

Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
80 85 90

Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
95 100 105

Ser Asp Gln Ile Met Thr Phe Arg Glu Arg Leu Leu His Lys Asn
110 115 120

Leu Gln Glu His Phe Ser Asn Gln Asp Leu Val Phe Leu Leu Leu
125 130 135

Thr Pro Ser Ile Ile Thr Glu Ser Cys Ser Thr His Arg Leu Glu
140 145 150

His Ser Leu Tyr Lys Pro Gln Lys Gly Leu Phe His Arg Val Pro
155 160 165

Leu Val Val Ala Asn Leu Gly Met Ser Glu Gln Leu Gly Tyr Lys
170 175 180

Thr Val Ser Gly Ser Cys Met Ser Thr Gly Phe Ser Arg Ala Val
185 190 195

Gln Thr His Ser Ser Lys Phe Phe Glu Glu Asp Gly Ser Leu Lys
200 205 210

Glu Val His Lys Ile Asn Glu Met Tyr Ala Ser Leu Gln Glu Glu
215 220 225

Leu Lys Ser Ile Cys Lys Lys Val Glu Asp Ser Glu Gln Ala Val
230 235 240

Asp Lys Leu Val Lys Asp Val Asn Arg Leu Lys Arg Glu Ile Glu
245 250 255

Lys Arg Arg Gly Ala Gln Ile Gln Ala Ala Arg Glu Lys Asn Ile
260 265 270

Gln Lys Asp Pro Gln Glu Asn Ile Phe Leu Cys Gln Ala Leu Arg

Sequence Listing - P3230R1C1.txt

275	280	285
Thr Phe Phe Pro Asn Ser Glu Phe Leu His Ser Cys Val Met Ser		
290	295	300
Leu Lys Asn Arg His Val Ser Lys Ser Ser Cys Asn Tyr Asn His		
305	310	315
His Leu Asp Val Val Asp Asn Leu Thr Leu Met Val Glu His Thr		
320	325	330
Asp Ile Pro Glu Ala Ser Pro Ala Ser Thr Pro Gln Ile Ile Lys		
335	340	345
His Lys Ala Leu Asp Leu Asp Asp Arg Trp Gln Phe Lys Arg Ser		
350	355	360
Arg Leu Leu Asp Thr Gln Asp Lys Arg Ser Lys Ala Asn Thr Gly		
365	370	375
Ser Ser Asn Gln Asp Lys Ala Ser Lys Met Ser Ser Pro Glu Thr		
380	385	390
Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg		
395	400	405

Ser Pro Thr Phe

<210> 23

<211> 2651

<212> DNA

<213> Homo Sapien

<400> 23

ggcacagccg cgcgggcgag ggcagagtca gccgagccga gtccagccgg 50

acgagcggac cagcgcaggg cagcccaagc agcgcgcagc gaacgcccgc 100

cgccgcccac accctctgcg gtccccgcgg cgctgccac ccttccttc 150

ttccccgct cccgcctcg ccggccagtc agcttgccgg gttcgctgcc 200

ccgcgaaacc ccgaggtcac cagcccgcgc ctctgcttcc ctgggcccgc 250

cgccgcctcc acgccctct tctcccttg cccggcgctt ggcaccgggg 300

accgttgctt gacgcgaggg ccagctctac ttttcgccc gcgtctctc 350

cgctgctcg cctttccac caactccaac tctttctcc tccagctcca 400

ctcgctagtc cccgactccg ccagccctcg gcccgctgcc gtagcgccgc 450

ttcccgctcg gtcccaaagg tgggaacgcg tccgccccgg ccgcaccat 500

Sequence Listing - P3230R1C1.txt

ggcacggttc ggctgcccc cgcttctctg caccctggca gtgctcagcg 550
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cgtctttacg tgtccaaagg cttcaacaag aacgatgccc ccctccacga 650
gatcaacggg gatcatttga agatctgtcc ccagggttct acctgctgct 700
ctcaagagat ggaggagaag tacagcctgc aaagtaaaga tgatttcaaa 750
agtgtggtca gcgaacagtg caatcatttg caagctgtct ttgcttcacg 800
ttacaagaag tttgatgaat tcttcaaaga actacttgaa aatgcagaga 850
aatccctgaa tgatatgttt gtgaagacat atggccattt atacatgcaa 900
aattctgagc tatttaaga tctcttcgta gagttgaaac gttactacgt 950
ggtagggaaat gtgaacctgg aagaaatgct aaatgacttc tgggctcgcc 1000
tcctggagcg gatgttccgc ctggtgaact cccagtagca ctttacagat 1050
gagtatctgg aatgtgtgag caagtatacg gagcagctga agcccttcgg 1100
agatgtccct cgcaaattga agctccagggt tactcgtgct tttgtagcag 1150
cccgtacttt cgctcaaggc ttagcggttg cgggagatgt cgtgagcaag 1200
gtctccgtgg taaacccac agcccagtggt acccatgccc tgttgaagat 1250
gatctactgc tcccactgcc ggggtctcgt gactgtgaag ccatgttaca 1300
actactgctc aaacatcatg agaggctggt tggccaacca aggggatctc 1350
gattttgaat ggaacaattt catagatgct atgctgatgg tggcagagag 1400
gctagagggg cctttcaaca ttgaatcggg catggatccc atcgatgtga 1450
agatttctga tgctattatg aacatgcagg ataatagtgt tcaagtgtct 1500
cagaagggtt tccagggatg tggaccccc aagcccctcc cagctggacg 1550
aatttctcgt tccatctctg aaagtcctt cagtgtctgc ttcagaccac 1600
atcacccga ggaacgcca accacagcag ctggcactag tttggaccga 1650
ctgggtactg atgtcaagga gaaactgaaa caggccaaga aattctggtc 1700
ctcccttcg agcaacgttt gcaacgatga gaggatggct gcaggaaacg 1750
gcaatgagga tgactgttgg aatgggaaag gcaaaagcag gtacctgttt 1800
gcagtgcag gaaatggatt agccaaccag ggcaacaacc cagaggtcca 1850
ggttgacacc agcaaaccag acatactgat ccttcgtcaa atcatggctc 1900

Sequence Listing - P3230R1C1.txt

ttcgagtgat gaccagcaag atgaagaatg catacaatgg gaacgacgtg 1950
gacttctttg atatcagtga tgaaagtagt ggagaaggaa gtggaagtgg 2000
ctgtgagtat cagcagtgcc cttcagagtt tgactacaat gccactgacc 2050
atgctgggaa gagtgccaat gagaaagccg acagtgctgg tgtccgtcct 2100
ggggcacagg cctacctct cactgtcttc tgcattcttg tcctggttat 2150
gcagagagag tggagataat tctcaaactc tgagaaaaag tgttcatcaa 2200
aaagttaaaa ggcaccagtt atcacttttc taccatccta gtgactttgc 2250
tttttaaatg aatggacaac aatgtacagt ttttactatg tggccactgg 2300
tttaagaagt gctgactttg ttttctcatt cagttttggg aggaaaaggg 2350
actgtgcatt gagtgggttc ctgctcccc aaaccatgtt aaacgtggct 2400
aacagtgtag gtacagaact atagttagtt gtgcatttgt gattttatca 2450
ctctattatt tgtttgatg tttttctc atttcgtttg tgggttttt 2500
ttccaactg tgatctgcc ttgtttctta caagcaaacc agggtcctt 2550
cttggcacgt aacatgtacg ttttctgaa atattaaata gctgtacaga 2600
agcaggtttt atttatcatg ttatcttatt aaaagaaaaa gcccaaaaag 2650
c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

Met Ala Arg Phe Gly Leu Pro Ala Leu Leu Cys Thr Leu Ala Val
1 5 10 15

Leu Ser Ala Ala Leu Leu Ala Ala Glu Leu Lys Ser Lys Ser Cys
20 25 30

Ser Glu Val Arg Arg Leu Tyr Val Ser Lys Gly Phe Asn Lys Asn
35 40 45

Asp Ala Pro Leu His Glu Ile Asn Gly Asp His Leu Lys Ile Cys
50 55 60

Pro Gln Gly Ser Thr Cys Cys Ser Gln Glu Met Glu Glu Lys Tyr
65 70 75

Ser Leu Gln Ser Lys Asp Asp Phe Lys Ser Val Val Ser Glu Gln
80 85 90

Sequence Listing - P3230R1C1.txt

Cys Asn His Leu Gln Ala Val Phe Ala Ser Arg Tyr Lys Lys Phe	95	100	105
Asp Glu Phe Phe Lys Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu	110	115	120
Asn Asp Met Phe Val Lys Thr Tyr Gly His Leu Tyr Met Gln Asn	125	130	135
Ser Glu Leu Phe Lys Asp Leu Phe Val Glu Leu Lys Arg Tyr Tyr	140	145	150
Val Val Gly Asn Val Asn Leu Glu Glu Met Leu Asn Asp Phe Trp	155	160	165
Ala Arg Leu Leu Glu Arg Met Phe Arg Leu Val Asn Ser Gln Tyr	170	175	180
His Phe Thr Asp Glu Tyr Leu Glu Cys Val Ser Lys Tyr Thr Glu	185	190	195
Gln Leu Lys Pro Phe Gly Asp Val Pro Arg Lys Leu Lys Leu Gln	200	205	210
Val Thr Arg Ala Phe Val Ala Ala Arg Thr Phe Ala Gln Gly Leu	215	220	225
Ala Val Ala Gly Asp Val Val Ser Lys Val Ser Val Val Asn Pro	230	235	240
Thr Ala Gln Cys Thr His Ala Leu Leu Lys Met Ile Tyr Cys Ser	245	250	255
His Cys Arg Gly Leu Val Thr Val Lys Pro Cys Tyr Asn Tyr Cys	260	265	270
Ser Asn Ile Met Arg Gly Cys Leu Ala Asn Gln Gly Asp Leu Asp	275	280	285
Phe Glu Trp Asn Asn Phe Ile Asp Ala Met Leu Met Val Ala Glu	290	295	300
Arg Leu Glu Gly Pro Phe Asn Ile Glu Ser Val Met Asp Pro Ile	305	310	315
Asp Val Lys Ile Ser Asp Ala Ile Met Asn Met Gln Asp Asn Ser	320	325	330
Val Gln Val Ser Gln Lys Val Phe Gln Gly Cys Gly Pro Pro Lys	335	340	345
Pro Leu Pro Ala Gly Arg Ile Ser Arg Ser Ile Ser Glu Ser Ala	350	355	360

Sequence Listing - P3230R1C1.txt

Phe Ser Ala Arg Phe Arg Pro His His Pro Glu Glu Arg Pro Thr
365 370 375

Thr Ala Ala Gly Thr Ser Leu Asp Arg Leu Val Thr Asp Val Lys
380 385 390

Glu Lys Leu Lys Gln Ala Lys Lys Phe Trp Ser Ser Leu Pro Ser
395 400 405

Asn Val Cys Asn Asp Glu Arg Met Ala Ala Gly Asn Gly Asn Glu
410 415 420

Asp Asp Cys Trp Asn Gly Lys Gly Lys Ser Arg Tyr Leu Phe Ala
425 430 435

Val Thr Gly Asn Gly Leu Ala Asn Gln Gly Asn Asn Pro Glu Val
440 445 450

Gln Val Asp Thr Ser Lys Pro Asp Ile Leu Ile Leu Arg Gln Ile
455 460 465

Met Ala Leu Arg Val Met Thr Ser Lys Met Lys Asn Ala Tyr Asn
470 475 480

Gly Asn Asp Val Asp Phe Phe Asp Ile Ser Asp Glu Ser Ser Gly
485 490 495

Glu Gly Ser Gly Ser Gly Cys Glu Tyr Gln Gln Cys Pro Ser Glu
500 505 510

Phe Asp Tyr Asn Ala Thr Asp His Ala Gly Lys Ser Ala Asn Glu
515 520 525

Lys Ala Asp Ser Ala Gly Val Arg Pro Gly Ala Gln Ala Tyr Leu
530 535 540

Leu Thr Val Phe Cys Ile Leu Phe Leu Val Met Gln Arg Glu Trp
545 550 555

Arg

<210> 25

<211> 870

<212> DNA

<213> Homo Sapien

<400> 25

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gctgagtatc ctgacctgag tcatccccag ggatcaggag cctccagcag 100

ggaaccttc attatattct tcaagcaact tacagctgca ccgacagttg 150

cgatgaaagt tctaattctt tcctctctcc tgttgctgcc actaatgctg 200

Sequence Listing - P3230R1C1.txt

atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250
 ggaccgagggc caggcttcta ggagatggct ccaggaaggc ggccaagaat 300
 gtgagtgcaa agattgggtc ctgagagccc cgagaagaaa attcatgaca 350
 gtgtctgggc tgccaaagaa gcagtgtccc tgtgatcatt tcaagggcaa 400
 tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450
 ccagagcctg ccagcaattt ctcaaacaat gtcagctaag aagctttgct 500
 ctgcctttgt aggagctctg agcgcccact cttccaatta aacatttca 550
 gccagaaga cagtgtgtgt acctaccaga cacttttctt ctcccacctc 600
 acttccccac tgtaccacc cctaaatcat tccagtgtc tcaaaaagca 650
 tgtttttcaa gatcattttg tttgtgtc tctctagtgt cttcttctct 700
 cgtcagtctt agcctgtgcc ctccccttac ccaggcttag gcttaattac 750
 ctgaaagatt ccaggaaact gtagcttct agctagtgtc atttaacctt 800
 aaatgcaatc aggaaagtag caaacagaag tcaataaata tttttaaatg 850
 tcaaaaaaaaa aaaaaaaaaa 870

<210> 26

<211> 119

<212> PRT

<213> Homo Sapien

<400> 26

Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Pro Leu Met
 1 5 10 15

Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg
 20 25 30

Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu
 35 40 45

Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro
 50 55 60

Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys
 65 70 75

Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln
 80 85 90

Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln
 95 100 105

Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu

110

115

<210> 27

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 27

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ggaagcacag ctgagagctg gtctgccatg gacatcctgg tcccactcct 100
gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
tgggctgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200
gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacggggagct 250
cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300
tggagctggg ctgcggaacc ggagccaact ttcagttcta cccaccgggc 350
tgcaggggtca cctgcctaga cccaaatccc cactttgaga agttcctgac 400
aaagagcatg gctgagaaca ggcacctcca atatgagcgg tttgtggtgg 450
ctctggaga ggacatgaga cagctggctg atggctccat ggatgtggtg 500
gtctgcactc tgggtgctgtg ctctgtgcag agcccaagga aggtcctgca 550
ggaggtccgg agagtactga gaccgggagg tgtgctcttt ttctgggagc 600
atgtggcaga accatatgga agctgggcct tcatgtggca gcaagttttc 650
gagcccacct ggaaacacat tggggatggc tgctgcctca ccagagagac 700
ctggaaggat cttgagaacg cccagttctc cgaaatcaa atggaacgac 750
agccccctcc cttgaagtgg ctacctgttg ggccccacat catgggaaag 800
gctgtcaaac aatctttccc aagctccaag gcactcattt gtccttccc 850
cagcctcaa ttagaacaag ccaccacca gcctatctat cttccactga 900
gagggaccta gcagaatgag agaagacatt catgtaccac ctactagtcc 950
ctctctcccc aacctctgcc agggcaatct ctaactcaa tccgccttc 1000
gacagtgaaa aagctctact tctacgctga cccagggagg aaactagg 1050
accctgttgt atctcaact gcaagtttct ggactagtct cccaacgttt 1100
gcctccaat gttgtcctt tccttcgttc ccatggtaaa gtcctctctg 1150
ctttcctcct gaggctacac ccatgcgtct ctaggaactg gtcacaaaag 1200

Sequence Listing - P3230R1C1.txt

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ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300
atgccagagc aagactcaaa gaggcagagg tttgttctc aaatattttt 1350
taataaatag acgaaaccac g 1371

<210> 28

<211> 277

<212> PRT

<213> Homo Sapien

<400> 28

Met Asp Ile Leu Val Pro Leu Leu Gln Leu Leu Val Leu Leu Leu
1 5 10 15

Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys Trp Gln Pro
20 25 30

Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro
35 40 45

Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser
50 55 60

Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
65 70 75

Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro
80 85 90

Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys
95 100 105

Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu
110 115 120

Arg Phe Val Val Ala Pro Gly Glu Asp Met Arg Gln Leu Ala Asp
125 130 135

Gly Ser Met Asp Val Val Val Cys Thr Leu Val Leu Cys Ser Val
140 145 150

Gln Ser Pro Arg Lys Val Leu Gln Glu Val Arg Arg Val Leu Arg
155 160 165

Pro Gly Gly Val Leu Phe Phe Trp Glu His Val Ala Glu Pro Tyr
170 175 180

Gly Ser Trp Ala Phe Met Trp Gln Gln Val Phe Glu Pro Thr Trp
185 190 195

Lys His Ile Gly Asp Gly Cys Cys Leu Thr Arg Glu Thr Trp Lys

Sequence Listing - P3230R1C1.txt

200	205	210
Asp Leu Glu Asn Ala Gln Phe Ser Glu Ile Gln Met Glu Arg Gln		
215	220	225
Pro Pro Pro Leu Lys Trp Leu Pro Val Gly Pro His Ile Met Gly		
230	235	240
Lys Ala Val Lys Gln Ser Phe Pro Ser Ser Lys Ala Leu Ile Cys		
245	250	255
Ser Phe Pro Ser Leu Gln Leu Glu Gln Ala Thr His Gln Pro Ile		
260	265	270
Tyr Leu Pro Leu Arg Gly Thr		
275		

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

<400> 29
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 aacgctgctg ctgctgctgc tgctgcttaa aggctcatgc ttggagtggg 100
 gactgggtcgg tgcccagaaa gtctcttctg ccactgacgc ccccatcagg 150
 gattgggcct tctttcccc ttcctttctg tgtctcctgc ctcacggcc 200
 tgccatgacc tgcagccaag cccagccccg tggggaaggg gagaaagtgg 250
 gggatggcta agaaagctgg gagatagggg acagaagagg gtagtgggtg 300
 ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350
 atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400
 cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450
 taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 30
 Met Leu Leu Leu Thr Leu Leu Leu Leu Leu Leu Leu Lys Gly
 1 5 10 15
 Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser
 20 25 30

Sequence Listing - P3230R1C1.txt

Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser
35 40 45

Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
50 55 60
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
65 70

<210> 31

<211> 1660

<212> DNA

<213> Homo Sapien

<400> 31

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cccaggctac cagttcctcc aagcaagtca tttcccttat ttaaccgatg 100
tgtccctcaa acacctgagt gctactccct attgcatct gttttgataa 150
atgatgttga caccctccac cgaattctaa gtggaatcat gtcggaaga 200
gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttgccat 250
gatgtttacc ttcagattca tcaccaccct tctggttcac attttcattt 300
cattggttat tttgggattg ttgtttgtct gcggtgttt atggtggctg 350
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aaatatgaag tgcgtgctgg gggttgctat cgtatccaca ggcacacgg 450
cagtgtgct cgtcttgatt ttgtttctca gaaagagaat aaaattgaca 500
gttgagcttt tcaaatacac aaataaagcc atcagcagtg ctcccttct 550
gctgttccag ccactgtgga catttgccat ctcattttc ttctgggtcc 600
tctgggtggc tgtgctgctg agcctgggaa ctgcaggagc tgcccagggt 650
atggaaggcg gccaaagtga atataagccc ctttcgggca ttcggtacat 700
gtggtcgtac catttaattg gcctcatctg gactagtga ttcaccttg 750
cgtgccagca aatgactata gctggggcag tggttacttg ttatttcaac 800
agaagtaaaa atgacctcc tgatcatccc atcctttcgt ctctctcat 850
tctcttctc taccatcaag gaaccgtgtg gaaagggta ttttaattc 900
ctgtggtgag gattccgaga atcattgtca tgtacatgca aaacgcactg 950
aaagaacagc agcatggtgc attgtccagg tacctgttcc gatgtgcta 1000
ctgctgtttc tgggtgtctg acaataacct gctccatctc aaccagaatg 1050

Sequence Listing - P3230R1C1.txt

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 gatgcattca aaatcttgtc caagaactca agtcacttta catctattaa 1150
 ctgctttgga gacttcataa ttttctagg aaagggtgta gtgggtgtgtt 1200
 tcactgtttt tggaggactc atggctttta actacaatcg ggcattccag 1250
 gtgtgggcag tcctctgtt attggtagct tttttgcct acttagtagc 1300
 ccatagtttt ttatctgtgt ttgaaactgt gctggatgca ctttctctgt 1350
 gttttgctgt tgatctggaa acaaatgatg gatcgtcaga aaagccctac 1400
 tttatggatc aagaatttct gagtttcgta aaaaggagca acaaatataa 1450
 caatgcaagg gcacagcagg acaagcactc attaaggaat gaggagggaa 1500
 cagaactcca ggccattgtg agatagatac ccatttaggt atctgtacct 1550
 ggaaaacatt tccttctaag agccatttac agaatagaag atgagaccac 1600
 tagagaaaag ttagtgaatt ttttttaaa agacctataa aaccctattc 1650
 ttctcaaaa 1660

<210> 32

<211> 445

<212> PRT

<213> Homo Sapien

<400> 32

Met Ser Gly Arg Asp Thr Ile Leu Gly Leu Cys Ile Leu Ala Leu

1 5 10 15

Ala Leu Ser Leu Ala Met Met Phe Thr Phe Arg Phe Ile Thr Thr

20 25 30

Leu Leu Val His Ile Phe Ile Ser Leu Val Ile Leu Gly Leu Leu

35 40 45

Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn

50 55 60

Asp Leu Ser Ile Glu Leu Asp Thr Glu Arg Glu Asn Met Lys Cys

65 70 75

Val Leu Gly Phe Ala Ile Val Ser Thr Gly Ile Thr Ala Val Leu

80 85 90

Leu Val Leu Ile Phe Val Leu Arg Lys Arg Ile Lys Leu Thr Val

95 100 105

Glu Leu Phe Gln Ile Thr Asn Lys Ala Ile Ser Ser Ala Pro Phe

110 115 120

Sequence Listing - P3230R1C1.txt

Leu Leu Phe Gln Pro Leu Trp Thr Phe Ala Ile Leu Ile Phe Phe
 125 130 135
 Trp Val Leu Trp Val Ala Val Leu Leu Ser Leu Gly Thr Ala Gly
 140 145 150
 Ala Ala Gln Val Met Glu Gly Gly Gln Val Glu Tyr Lys Pro Leu
 155 160 165
 Ser Gly Ile Arg Tyr Met Trp Ser Tyr His Leu Ile Gly Leu Ile
 170 175 180
 Trp Thr Ser Glu Phe Ile Leu Ala Cys Gln Gln Met Thr Ile Ala
 185 190 195
 Gly Ala Val Val Thr Cys Tyr Phe Asn Arg Ser Lys Asn Asp Pro
 200 205 210
 Pro Asp His Pro Ile Leu Ser Ser Leu Ser Ile Leu Phe Phe Tyr
 215 220 225
 His Gln Gly Thr Val Val Lys Gly Ser Phe Leu Ile Ser Val Val
 230 235 240
 Arg Ile Pro Arg Ile Ile Val Met Tyr Met Gln Asn Ala Leu Lys
 245 250 255
 Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu Phe Arg Cys Cys
 260 265 270
 Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu His Leu Asn
 275 280 285
 Gln Asn Ala Tyr Thr Thr Thr Ala Ile Asn Gly Thr Asp Phe Cys
 290 295 300
 Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser Ser
 305 310 315
 His Phe Thr Ser Ile Asn Cys Phe Gly Asp Phe Ile Ile Phe Leu
 320 325 330
 Gly Lys Val Leu Val Val Cys Phe Thr Val Phe Gly Gly Leu Met
 335 340 345
 Ala Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu
 350 355 360
 Leu Leu Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu
 365 370 375
 Ser Val Phe Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala
 380 385 390
 Val Asp Leu Glu Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe

Sequence Listing - P3230R1C1.txt

395 400 405

Met Asp Gln Glu Phe Leu Ser Phe Val Lys Arg Ser Asn Lys Leu
410 415 420

Asn Asn Ala Arg Ala Gln Gln Asp Lys His Ser Leu Arg Asn Glu
425 430 435

Glu Gly Thr Glu Leu Gln Ala Ile Val Arg
440 445

<210> 33

<211> 2773

<212> DNA

<213> Homo Sapien

<400> 33

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aagggaataa gaattatcat tctgtgtggt gaaaatttt tgaaaaaaa 150

attgccttct tcaaacaagg gtgtcattct gatatttatg aggactgttg 200

ttctcactat gaaggcatct gttattgaaa tggtccttgt ttgctgggtg 250

actggagtac attcaaaca agaacggca aagaagatta aaaggcccaa 300

gttcactgtg cctcagatca actgcgatgt caaagccgga aagatcatcg 350

atcctgagtt cattgtgaaa tgtccagcag gatgccaaga ccccaaatac 400

catgtttatg gcactgacgt gtatgcatcc tactccagtg tgtgtggcgc 450

tgccgtacac agtgggtgtg ttgataattc aggagggaaa atactgttc 500

ggaaggttgc tggacagtct gggtacaaag ggagttattc caacggtgtc 550

caatcggtat ccctaccacg atggagagaa tcctttatcg tcttagaaag 600

taaacccaaa aagggtgtaa cctaccatc agctcttaca tactcatcat 650

cgaaaagtcc agctgcccaa gcaggtgaga ccacaaaagc ctatcagagg 700

ccacctattc cagggaacac tgcacagccg gtcactctga tgcagcttct 750

ggctgtcact gtagctgtgg ccacccccac caccttgcca aggccatccc 800

cttctgctgc ttctaccacc agcatccca gaccacaatc agtggggccac 850

aggagccagg agatggatct ctggtccact gccacctaca caagcagcca 900

aaacaggccc agagctgatc caggtatcca aaggcaagat cttcaggag 950

ctgccttcca gaaacctgtt ggagcggatg tcagcctggg acttgttcca 1000

Sequence Listing - P3230R1C1.txt

aaagaagaat tgagcacaca gtctttggag ccagtatccc tgggagatcc 1050
aaactgcaaa attgacttgt cgttttaat tgatgggagc accagcattg 1100
gcaaacggcg attccgaatc cagaagcagc tcctggctga tgttgccaa 1150
gctcttgaca ttggccctgc cgggccactg atgggtgttg tccagtatgg 1200
agacaaccct gctactcact ttaacctcaa gacacacacg aattctcgag 1250
atctgaagac agccatagag aaaattactc agagaggagg actttctaata 1300
gtaggtcggg ccatctcctt tgtgaccaag aacttctttt ccaaagccaa 1350
tggaacaga agcggggctc ccaatgtggg ggtggtgatg gtggatggct 1400
ggccacgga caaagtggag gaggctcaa gacttgcgag agagtcagga 1450
atcaacattt tctcatcac cattgaagggt gctgctgaaa atgagaagca 1500
gtatgtgggt gagcccaact ttgcaacaa ggccgtgtgc agaacaacg 1550
gcttctactc gctccacgtg cagagctggg ttggcctcca caagaccctg 1600
cagcctctgg tgaagcgggt ctgcgacact gaccgcctgg cctgcagcaa 1650
gacctgcttg aactcggctg acattggctt cgtcatcgac ggctccagca 1700
gtgtggggac gggcaacttc cgcaccgtcc tccagtttgt gaccaacctc 1750
accaaagagt ttgagatttc cgacacggac acgcgcatcg gggccgtgca 1800
gtacacctac gaacagcggc tggagtttgg gttcgacaag tacagcagca 1850
agcctgacat cctcaacgcc atcaagaggg tgggctactg gagtgggtggc 1900
accagcacgg gggctgccat caacttcgcc ctggagcagc tcttaagaa 1950
gtccaagccc aacaagagga agttaatgat cctcatcacc gacgggaggt 2000
cctacgacga cgtccggatc ccagccatgg ctgcccattt gaaggagtg 2050
atcacctatg cgataggcgt tgcctgggct gcccaagagg agctagaagt 2100
cattgccact caccgcgcca gagaccactc cttctttgtg gacgagttg 2150
acaacctcca tcagtatgtc ccaggatca tccagaacat ttgtacagag 2200
ttcaactcac agcctcgga ctgaattcag agcaggcaga gcaccagcaa 2250
gtgctgcttt actaactgac gtgttgacc accccaccgc ttaatggggc 2300
acgcacgggt catcaagtct tgggcagggc atggagaaac aaatgtcttg 2350

Sequence Listing - P3230R1C1.txt

ttattattct ttgccatcat gctttttcat attcctaaac ttggagttac 2400
 aaagatgatc acaaacgtat agaatgagcc aaaaggctac atcatgttga 2450
 ggggtgctgga gattttacat ttgacaatt gttttcaaaa taaatgttcg 2500
 gaatacagtg cagcccttac gacaggctta cgtagagctt ttgtgagatt 2550
 ttttaagttgt tattttctgat ttgaactctg taaccctcag caagtttcat 2600
 ttttgcacatg acaatgtagg aattgctgaa ttaaatgttt agaaggatga 2650
 aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750
 aaaaaaaaaa aaaaaaaaaa aag 2773

<210> 34

<211> 678

<212> PRT

<213> Homo Sapien

<400> 34

Met Arg Thr Val Val Leu Thr Met Lys Ala Ser Val Ile Glu Met
 1 5 10 15

Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr
 20 25 30

Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
 35 40 45

Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60

Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75

Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90

His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105

Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120

Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135

Leu Glu Ser Lys Pro Lys Lys Gly Val Thr Tyr Pro Ser Ala Leu
 140 145 150

Thr Tyr Ser Ser Ser Lys Ser Pro Ala Ala Gln Ala Gly Glu Thr

Sequence Listing - P3230R1C1.txt

155	160	165
Thr Lys Ala Tyr Gln Arg	Pro Pro Ile Pro Gly Thr Thr Ala Gln	
170	175	180
Pro Val Thr Leu Met Gln Leu Leu Ala Val Thr Val Ala Val Ala		
185	190	195
Thr Pro Thr Thr Leu Pro Arg Pro Ser Pro Ser Ala Ala Ser Thr		
200	205	210
Thr Ser Ile Pro Arg Pro Gln Ser Val Gly His Arg Ser Gln Glu		
215	220	225
Met Asp Leu Trp Ser Thr Ala Thr Tyr Thr Ser Ser Gln Asn Arg		
230	235	240
Pro Arg Ala Asp Pro Gly Ile Gln Arg Gln Asp Pro Ser Gly Ala		
245	250	255
Ala Phe Gln Lys Pro Val Gly Ala Asp Val Ser Leu Gly Leu Val		
260	265	270
Pro Lys Glu Glu Leu Ser Thr Gln Ser Leu Glu Pro Val Ser Leu		
275	280	285
Gly Asp Pro Asn Cys Lys Ile Asp Leu Ser Phe Leu Ile Asp Gly		
290	295	300
Ser Thr Ser Ile Gly Lys Arg Arg Phe Arg Ile Gln Lys Gln Leu		
305	310	315
Leu Ala Asp Val Ala Gln Ala Leu Asp Ile Gly Pro Ala Gly Pro		
320	325	330
Leu Met Gly Val Val Gln Tyr Gly Asp Asn Pro Ala Thr His Phe		
335	340	345
Asn Leu Lys Thr His Thr Asn Ser Arg Asp Leu Lys Thr Ala Ile		
350	355	360
Glu Lys Ile Thr Gln Arg Gly Gly Leu Ser Asn Val Gly Arg Ala		
365	370	375
Ile Ser Phe Val Thr Lys Asn Phe Phe Ser Lys Ala Asn Gly Asn		
380	385	390
Arg Ser Gly Ala Pro Asn Val Val Val Val Met Val Asp Gly Trp		
395	400	405
Pro Thr Asp Lys Val Glu Glu Ala Ser Arg Leu Ala Arg Glu Ser		
410	415	420
Gly Ile Asn Ile Phe Phe Ile Thr Ile Glu Gly Ala Ala Glu Asn		
425	430	435

Sequence Listing - P3230R1C1.txt

Glu Lys Gln Tyr Val Val Glu Pro Asn Phe Ala Asn Lys Ala Val
440 445 450

Cys Arg Thr Asn Gly Phe Tyr Ser Leu His Val Gln Ser Trp Phe
455 460 465

Gly Leu His Lys Thr Leu Gln Pro Leu Val Lys Arg Val Cys Asp
470 475 480

Thr Asp Arg Leu Ala Cys Ser Lys Thr Cys Leu Asn Ser Ala Asp
485 490 495

Ile Gly Phe Val Ile Asp Gly Ser Ser Ser Val Gly Thr Gly Asn
500 505 510

Phe Arg Thr Val Leu Gln Phe Val Thr Asn Leu Thr Lys Glu Phe
515 520 525

Glu Ile Ser Asp Thr Asp Thr Arg Ile Gly Ala Val Gln Tyr Thr
530 535 540

Tyr Glu Gln Arg Leu Glu Phe Gly Phe Asp Lys Tyr Ser Ser Lys
545 550 555

Pro Asp Ile Leu Asn Ala Ile Lys Arg Val Gly Tyr Trp Ser Gly
560 565 570

Gly Thr Ser Thr Gly Ala Ala Ile Asn Phe Ala Leu Glu Gln Leu
575 580 585

Phe Lys Lys Ser Lys Pro Asn Lys Arg Lys Leu Met Ile Leu Ile
590 595 600

Thr Asp Gly Arg Ser Tyr Asp Asp Val Arg Ile Pro Ala Met Ala
605 610 615

Ala His Leu Lys Gly Val Ile Thr Tyr Ala Ile Gly Val Ala Trp
620 625 630

Ala Ala Gln Glu Glu Leu Glu Val Ile Ala Thr His Pro Ala Arg
635 640 645

Asp His Ser Phe Phe Val Asp Glu Phe Asp Asn Leu His Gln Tyr
650 655 660

Val Pro Arg Ile Ile Gln Asn Ile Cys Thr Glu Phe Asn Ser Gln
665 670 675

Pro Arg Asn

<210> 35
<211> 2095
<212> DNA

Sequence Listing - P3230R1C1.txt

<213> Homo Sapien

<400> 35

ccgagcacag gagattgcct gcgtttagga ggtggctgcg ttgtgggaaa 50
agctatcaag gaagaaattg ccaaaccatg tcttttttc tgttttcaga 100
gtagttcaca acagatctga gtgttttaat taagcatgga atacagaaaa 150
caacaaaaaa ctaagcttt aatttcattt ggaattccac agttttctta 200
gctccctgga cccggttgac ctgttggtc tccccgctgg ctgctctatc 250
acgtgggtgct ctccgactac tcaccccgag tgtaaagaac cttcggtcgc 300
cgtgcttctg agctgctgtg gatggcctcg gctctctgga ctgctctcc 350
gagtaggatg tcaatgagat cctcaaatg gagcctctg ctgctgtcac 400
tcctgagttt cttgtgatg tggtaacctc gccttccca ctacaatgtg 450
atagaacgcg tgaactggat gtacttctat gagtatgagc cgatttacag 500
acaagacttt cacttcacac ttcgagagca ttcaaactgc tctcatcaa 550
atccatttct ggtcattctg gtgacctccc acccttcaga tgtgaaagcc 600
aggcaggcca ttagagttac ttgggggtgaa aaaaagtctt ggtggggata 650
tgagggttctt acatttttct tattaggcca agaggctgaa aaggaagaca 700
aaatgttggc attgtcctta gaggatgaac accttcttta tggtagacata 750
atccgacaag attttttaga cacatataat aacctgacct tgaaccat 800
tatggcattc aggtgggtaa ctgagttttg cccaatgcc aagtacgtaa 850
tgaagacaga cactgatgtt tcatcaata ctggcaattt agtgaagtat 900
cttttaaacc taaaccactc agagaagttt ttacagggtt atcctcta 950
tgataattat tcctatagag gattttacca aaaaacccat atttcttacc 1000
aggagtatcc ttcaagggtg ttccctccat actgcagtgg gttgggttat 1050
ataatgtcca gagatttggg gccaaaggatc tatgaaatga tgggtcacgt 1100
aaaaccatc aagtttgaag atgtttatgt cgggatctgt ttgaatttat 1150
taaaagtga cattcatatt ccagaagaca caaatctttt ctttctatat 1200
agaatccatt tggatgtctg tcaactgaga cgtgtgattg cagcccatgg 1250
cttttctcc aaggagatca tcacttttg gcagggtcatg ctaaggaaca 1300

Sequence Listing - P3230R1C1.txt

ccacatgccca ttattaactt cacattctac aaaaagccta gaaggacagg 1350
 ataccttggtg gaaagtgtta aataaagtag gtactgtgga aaattcatgg 1400
 ggaggtcagt gtgctggcct acactgaact gaaactcatg aaaaaccag 1450
 actggagact ggaggggttac acttggtgatt tattagtcag gcccttcaaa 1500
 gatgatattgt ggaggaatta aatataaagg aattggaggt ttttgctaaa 1550
 gaaattaata ggaccaaaaca atttgacat gtcattctgt agactagaat 1600
 ttcttaaaag ggtgttactg agttataagc tcactaggct gtaaaaacaa 1650
 aacaatgtag agttttatatt attgaacaat gtagtcactt gaagggtttg 1700
 tgtatatctt atgtggatta ccaatttaaa aatatatgta gttctgtgtc 1750
 aaaaaacttc ttactgaag ttatactgaa caaaatttta cctgtttttg 1800
 gtcatttata aagtacttca agatgttgca gtatttcaca gttattatta 1850
 tttaaaatta cttcaacttt gtgtttttaa atgttttgac gatttcaata 1900
 caagataaaa aggatagtga atcattcttt acatgcaaac atttccagt 1950
 tacttaactg atcagtttat tattgataca tcactccatt aatgtaaagt 2000
 cataggtcat tattgcatat cagtaatctc ttggactttg ttaaataatt 2050
 tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 36

<211> 331

<212> PRT

<213> Homo Sapien

<400> 36

Met Ala Ser Ala Leu Trp Thr Val Leu Pro Ser Arg Met Ser Leu
 1 5 10 15

Arg Ser Leu Lys Trp Ser Leu Leu Leu Leu Ser Leu Leu Ser Phe
 20 25 30

Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu
 35 40 45

Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg
 50 55 60

Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
 65 70 75

Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
 80 85 90

Sequence Listing - P3230R1C1.txt

Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln
110 115 120

Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp
125 130 135

Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp
140 145 150

Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp
155 160 165

Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp
170 175 180

Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu
185 190 195

Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile
200 205 210

Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser
215 220 225

Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly
230 235 240

Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu
245 250 255

Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val
260 265 270

Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu
275 280 285

Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys
290 295 300

Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu
305 310 315

Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His
320 325 330

Tyr

<210> 37
<211> 2846
<212> DNA

Sequence Listing - P3230R1C1.txt

<213> Homo Sapien

<400> 37

cgctcgggga ccagccgcgg caaggatgga gctgggttgc tggacgcagt 50
tggggctcac tttcttcag ctcttctca tctcgtcctt gccaaagagag 100
tacacagtca ttaatgaagc ctgccttga gcagagtga atatcatgtg 150
tcgggagtgc tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200
gggaagtcgt ggggtatacc atcccttgct gcaggaatga ggagaatgag 250
tgtgactcct gcctgatcca ccaggttgt accatctttg aaaactgcaa 300
gagctgccga aatggctcat gggggggtac ctggatgac ttctatgtga 350
aggggttcta ctgtgcagag tgccgagcag gctggtacgg aggagactgc 400
atgcgatgtg gccaggttct gcgagcccca aagggtcaga tttgttgga 450
aagctatccc ctaaagtctc actgtgaatg gaccattcat gctaaacctg 500
ggtttgtcat ccaactaaga tttgtcatgt tgagtctgga gtttgactac 550
atgtgccagt atgactatgt tgaggttcgt gatggagaca accgcgatgg 600
ccagatcatc aagcgtgtct gtggcaacga gcggccagct cctatccaga 650
gcataggatc ctactccac gtcctcttc actccgatgg ctccaagaat 700
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cccttgttc catgacggca cgtgcgtcct tgacaaggct ggatcttaca 800
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gaagaaagaa actgctcaga ccctgggggc ccagtcaatg ggtaccagaa 900
aataacaggg ggccttgggc ttatcaacgg acgcatgct aaaattggca 950
ccgtggtgtc tttctttgt aacaactcct atgttcttag tggcaatgag 1000
aaaagaactt gccagcagaa tggagagtgg tcagggaac agcccatctg 1050
cataaaagcc tgccgagaac caaagattc agacctggtg agaaggagag 1100
ttcttcgat gcaggttcag tcaagggaga caccattaca ccagctatac 1150
tcagcggcct tcagcaagca gaaactgcag agtgccccta ccaagaagcc 1200
agcccttccc ttggagatc tgcccatggg ataccaacat ctgcataccc 1250
agctccagta tgagtgcac tcaccttct accgccgcct gggcagcagc 1300

Sequence Listing - P3230R1C1.txt

aggaggacat gtctgaggac tgggaagtgg agtgggcggg caccatcctg 1350
catccctatc tgcgggaaaa ttgagaacat cactgctcca aagaccaag 1400
ggttgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450
catgacggca gcctacacaa gggagcgtgg ttcctagtct gcagcgggtg 1500
cctggtgaat gagcgcactg tgggtggtggc tgcccactgt gttactgacc 1550
tggggaaggt caccatgatc aagacagcag acctgaaagt tgttttgggg 1600
aaattctacc gggatgatga ccgggatgag aagaccatcc agagcctaca 1650
gatttctgct atcattctgc atcccaacta tgaccccatc ctgcttgatg 1700
ctgacatcg catcctgaag ctctagaca agggccgtat cagcacccga 1750
gtccagccca tctgcctcgc tgccagtcgg gatctcagca cttccttcca 1800
ggagtccac atcactgtgg ctggctggaa tgtcctggca gacgtgagga 1850
gccctggctt caagaacgac aactgcgct ctgggggtgg cagtgtggtg 1900
gactcgtgc tgtgtgagga gcagcatgag gaccatggca tccagtgag 1950
tgtcactgat aacatgttct gtgccagctg ggaaccact gcccttctg 2000
atatctgcac tgagagaca ggaggcatcg cggctgtgtc cttcccggga 2050
cgagcatctc ctgagccacg ctggcatctg atgggactgg tcagctggag 2100
ctatgataaa acatgcagcc acaggctctc cactgccttc accaagggtg 2150
tgccttttaa agactggatt gaaagaaata tgaaatgaac catgctcatg 2200
cactcctga gaagtgttct tgtatatccg tctgtacgtg tgtcattgctg 2250
tgaagcagtg tgggcctgaa gtgtgattg gcctgtgaac ttggctgtgc 2300
cagggcttct gacttcaggg aaaaaactca gtgaagggtg agtagacctc 2350
cattgctggt aggctgatgc cgcgtccact actaggacag ccaattggaa 2400
gatgccaggg ctgcaagaa gtaagtttct tcaaagaaga ccatatacaa 2450
aaccttcca ctccactgac ctggtggtct tcccaactt tcagttatac 2500
gaatgccatc agcttgacca gggaagatct gggcttcattg agggcccttt 2550
tgaggctctc aagtctaga gagctgcctg tgggacagcc cagggcagca 2600
gagctgggat gtggtgcatg ctttgtgta catggccaca gtacagtctg 2650
gtccttttcc ttcccatct cttgtacaca tttaataaaa ataagggttg 2700

Sequence Listing - P3230R1C1.txt

gcttctgaac tacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2800

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2846

<210> 38

<211> 720

<212> PRT

<213> Homo Sapien

<400> 38

Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln

1 5 10 15

Leu Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn

20 25 30

Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys

35 40 45

Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu

50 55 60

Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu

65 70 75

Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn

80 85 90

Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp

95 100 105

Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp

110 115 120

Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro

125 130 135

Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys

140 145 150

Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg

155 160 165

Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp

170 175 180

Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile

185 190 195

Lys Arg Val Cys Gly Asn Glu Arg Pro Ala Pro Ile Gln Ser Ile

200 205 210

Gly Ser Ser Leu His Val Leu Phe His Ser Asp Gly Ser Lys Asn

215 220 225

Sequence Listing - P3230R1C1.txt

Phe Asp Gly Phe His Ala Ile Tyr Glu Glu Ile Thr Ala Cys Ser
 230 235 240
 Ser Ser Pro Cys Phe His Asp Gly Thr Cys Val Leu Asp Lys Ala
 245 250 255
 Gly Ser Tyr Lys Cys Ala Cys Leu Ala Gly Tyr Thr Gly Gln Arg
 260 265 270
 Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser Asp Pro Gly Gly
 275 280 285
 Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile
 290 295 300
 Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys
 305 310 315
 Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln
 320 325 330
 Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala
 335 340 345
 Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu
 350 355 360
 Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr
 365 370 375
 Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys
 380 385 390
 Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His
 395 400 405
 Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg
 410 415 420
 Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp
 425 430 435
 Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu
 440 445 450
 Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln
 455 460 465
 Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu
 470 475 480
 His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn
 485 490 495
 Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly

Sequence Listing - P3230R1C1.txt

500 505 510

Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly
515 520 525

Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser
530 535 540

Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile
545 550 555

Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala
560 565 570

Arg Ile Ser Thr Arg Val Gln Pro Ile Cys Leu Ala Ala Ser Arg
575 580 585

Asp Leu Ser Thr Ser Phe Gln Glu Ser His Ile Thr Val Ala Gly
590 595 600

Trp Asn Val Leu Ala Asp Val Arg Ser Pro Gly Phe Lys Asn Asp
605 610 615

Thr Leu Arg Ser Gly Val Val Ser Val Val Asp Ser Leu Leu Cys
620 625 630

Glu Glu Gln His Glu Asp His Gly Ile Pro Val Ser Val Thr Asp
635 640 645

Asn Met Phe Cys Ala Ser Trp Glu Pro Thr Ala Pro Ser Asp Ile
650 655 660

Cys Thr Ala Glu Thr Gly Gly Ile Ala Ala Val Ser Phe Pro Gly
665 670 675

Arg Ala Ser Pro Glu Pro Arg Trp His Leu Met Gly Leu Val Ser
680 685 690

Trp Ser Tyr Asp Lys Thr Cys Ser His Arg Leu Ser Thr Ala Phe
695 700 705

Thr Lys Val Leu Pro Phe Lys Asp Trp Ile Glu Arg Asn Met Lys
710 715 720

<210> 39

<211> 2571

<212> DNA

<213> Homo Sapien

<400> 39

ggttcctaca tcctctcatc tgagaatcag agagcataat cttcttacgg 50

gcccgtgatt tattaacgtg gcttaatctg aaggttctca gtcaaattct 100

ttgtgatcta ctgattgtgg gggcatggca aggtttgctt aaaggagctt 150

Sequence Listing - P3230R1C1.txt

ggctgggttg ggcccttgta gctgacagaa ggtggccagg gagaatgcag 200
cacactgctc ggagaatgaa ggcgcttctg ttgctgggtct tgccttggtc 250
cagtcctgct aactacattg acaatgtggg caacctgcac ttctgtatt 300
cagaactctg taaaggtgcc tcccactacg gcctgaccaa agataggaag 350
aggcgctcac aagatggctg tccagacggc tgtgcgagcc tcacagccac 400
ggctccctcc ccagaggttt ctgcagctgc caccatctcc ttaatgacag 450
acgagcctgg cctagacaac cctgcctacg tgtcctcggc agaggacggg 500
cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550
acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650
aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700
agtctttcca aggttgtagc acctgattcc agatggtgaa attaccagca 750
tcaagatcaa tcgagtagat cccagtgaag gcctctctat taggctggtg 800
ggaggtagcg aaacccact ggtccatc attatccaac acatttatcg 850
tgatgggggtg atcgccagag acggccggct actgccagga gacatcattc 900
taaaggtcaa cgggatggac atcagcaatg tcctcacao ctacgtgtg 950
cgtctcctgc ggcagccctg ccaggtgctg tggctgactg tgatgcgtga 1000
acagaagttc cgcagcagga acaatggaca ggccccgat gcctacagac 1050
cccgagatga cagctttcat gtgattctca acaaaagtag ccccgaggag 1100
cagcttgga taaaactggt gcgcaagggt gatgagcctg gggttttcat 1150
cttcaatgtg ctggatggcg gtgtggcata tcgacatggt cagcttgagg 1200
agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250
ccagaaagtg cggctcatct gattcaggcc agtgaaagac gtgttcacct 1300
cgtcgtgtcc cgccagggtc ggcagcggag ccctgacatc tttcaggaag 1350
ccggctggaa cagcaatggc agctgggtccc cagggccagg ggagaggagc 1400
aacactccca agcccctcca tcctacaatt acttgctatg agaaggtggt 1450
aaatatcaa aaagaccccg gtgaatctct cggcatgacc gtcgcagggg 1500

Sequence Listing - P3230R1C1.txt

gagcatcaca tagagaatgg gatttgccta tctatgtcat cagtgttgag 1550
 cccggaggag tcataagcag agatggaaga ataaaaacag gtgacatttt 1600
 gttgaatgtg gatgggggtcg aactgacaga ggtcagccgg agtgaggcag 1650
 tggcattatt gaaaagaaca tcatcctcga tagtactcaa agctttggaa 1700
 gtcaaagagt atgagcccca ggaagactgc agcagcccag cagccctgga 1750
 ctccaaccac aacatggccc caccagtgga ctgggtccca tcctgggtca 1800
 tgtggctgga attaccacgg tgcttgata actgtaaaga tattgtatta 1850
 cgaagaaaca cagctggaag tctgggcttc tgcattgtag gaggttatga 1900
 agaatacaat ggaacaaac ctttttcat caaatccatt gttgaaggaa 1950
 caccagcata caatgatgga agaattagat gtggtgatat tcttcttgct 2000
 gtcaatggta gaagtacatc aggaatgata catgcttgct tggcaagact 2050
 gctgaaagaa cttaaaggaa gaattactct aactattgtt tcttggcctg 2100
 gcacttttt atagaatcaa tgatgggtca gaggaaaaca gaaaaatcac 2150
 aaataggcta agaagttgaa acactatatt tatcttgta gttttatat 2200
 ttaaagaaag aatacattgt aaaaatgtca ggaaaagtat gatcatctaa 2250
 tgaaagccag ttacacctca gaaaatatga ttcaaaaaa attaaaacta 2300
 ctagttttt ttcagtgtgg aggattctc attactctac aacattgttt 2350
 atatttttc tattcaataa aaagccctaa aacaactaaa atgattgatt 2400
 tgtatacccc actgaattca agctgattta aatttaaaat ttggtatatg 2450
 ctgaagtctg ccaagggtag attatggcca ttttaattt acagctaaaa 2500
 tattttttaa aatgcattgc tgagaaacgt tgctttcatc aaacaagaat 2550
 aaatattttt cagaagttaa a 2571

<210> 40

<211> 632

<212> PRT

<213> Homo Sapien

<400> 40

Met	Lys	Ala	Leu	Leu	Leu	Leu	Val	Leu	Pro	Trp	Leu	Ser	Pro	Ala
1			5			10			15					

Asn	Tyr	Ile	Asp	Asn	Val	Gly	Asn	Leu	His	Phe	Leu	Tyr	Ser	Glu
	20				25				30					

Sequence Listing - P3230R1C1.txt

Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
 35 40 45
 Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
 50 55 60
 Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser
 65 70 75
 Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser
 80 85 90
 Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly
 95 100 105
 Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile
 110 115 120
 Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu
 125 130 135
 Arg Arg Thr Lys Ser Gly Ser Ala Val Ala Asn His Ala Asp Gln
 140 145 150
 Gly Arg Glu Asn Ser Glu Asn Thr Thr Ala Pro Glu Val Phe Pro
 155 160 165
 Arg Leu Tyr His Leu Ile Pro Asp Gly Glu Ile Thr Ser Ile Lys
 170 175 180
 Ile Asn Arg Val Asp Pro Ser Glu Ser Leu Ser Ile Arg Leu Val
 185 190 195
 Gly Gly Ser Glu Thr Pro Leu Val His Ile Ile Ile Gln His Ile
 200 205 210
 Tyr Arg Asp Gly Val Ile Ala Arg Asp Gly Arg Leu Leu Pro Gly
 215 220 225
 Asp Ile Ile Leu Lys Val Asn Gly Met Asp Ile Ser Asn Val Pro
 230 235 240
 His Asn Tyr Ala Val Arg Leu Leu Arg Gln Pro Cys Gln Val Leu
 245 250 255
 Trp Leu Thr Val Met Arg Glu Gln Lys Phe Arg Ser Arg Asn Asn
 260 265 270
 Gly Gln Ala Pro Asp Ala Tyr Arg Pro Arg Asp Asp Ser Phe His
 275 280 285
 Val Ile Leu Asn Lys Ser Ser Pro Glu Glu Gln Leu Gly Ile Lys
 290 295 300

Sequence Listing - P3230R1C1.txt

Leu Val Arg Lys Val Asp Glu Pro Gly Val Phe Ile Phe Asn Val
 305 310 315
 Leu Asp Gly Gly Val Ala Tyr Arg His Gly Gln Leu Glu Glu Asn
 320 325 330
 Asp Arg Val Leu Ala Ile Asn Gly His Asp Leu Arg Tyr Gly Ser
 335 340 345
 Pro Glu Ser Ala Ala His Leu Ile Gln Ala Ser Glu Arg Arg Val
 350 355 360
 His Leu Val Val Ser Arg Gln Val Arg Gln Arg Ser Pro Asp Ile
 365 370 375
 Phe Gln Glu Ala Gly Trp Asn Ser Asn Gly Ser Trp Ser Pro Gly
 380 385 390
 Pro Gly Glu Arg Ser Asn Thr Pro Lys Pro Leu His Pro Thr Ile
 395 400 405
 Thr Cys His Glu Lys Val Val Asn Ile Gln Lys Asp Pro Gly Glu
 410 415 420
 Ser Leu Gly Met Thr Val Ala Gly Gly Ala Ser His Arg Glu Trp
 425 430 435
 Asp Leu Pro Ile Tyr Val Ile Ser Val Glu Pro Gly Gly Val Ile
 440 445 450
 Ser Arg Asp Gly Arg Ile Lys Thr Gly Asp Ile Leu Leu Asn Val
 455 460 465
 Asp Gly Val Glu Leu Thr Glu Val Ser Arg Ser Glu Ala Val Ala
 470 475 480
 Leu Leu Lys Arg Thr Ser Ser Ser Ile Val Leu Lys Ala Leu Glu
 485 490 495
 Val Lys Glu Tyr Glu Pro Gln Glu Asp Cys Ser Ser Pro Ala Ala
 500 505 510
 Leu Asp Ser Asn His Asn Met Ala Pro Pro Ser Asp Trp Ser Pro
 515 520 525
 Ser Trp Val Met Trp Leu Glu Leu Pro Arg Cys Leu Tyr Asn Cys
 530 535 540
 Lys Asp Ile Val Leu Arg Arg Asn Thr Ala Gly Ser Leu Gly Phe
 545 550 555
 Cys Ile Val Gly Gly Tyr Glu Glu Tyr Asn Gly Asn Lys Pro Phe
 560 565 570
 Phe Ile Lys Ser Ile Val Glu Gly Thr Pro Ala Tyr Asn Asp Gly

Sequence Listing - P3230R1C1.txt

575 580 585

Arg Ile Arg Cys Gly Asp Ile Leu Leu Ala Val Asn Gly Arg Ser
590 595 600

Thr Ser Gly Met Ile His Ala Cys Leu Ala Arg Leu Leu Lys Glu
605 610 615

Leu Lys Gly Arg Ile Thr Leu Thr Ile Val Ser Trp Pro Gly Thr
620 625 630

Phe Leu

<210> 41

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 41

accaggcatt gtatcttcag ttgtcatcaa gttcgcaatc agattggaaa 50
agctcaactt gaagctttct tgcctgcagt gaagcagaga gatagatatt 100
attcacgtaa taaaaaacat gggcttcaac ctgactttcc acctttccta 150
caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250
aaggagtcca tggctaattt ccataagacc ctcattttgg ggaagggaaa 300
aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
cttctgtgtc tccttacctc agaggccaga gcaagctcat ttcaaacca 400
gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
ccggtatcgc ctcaggaat gtaaagcttt acagaggggtc gccatcctcg 500
ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
tccaagcat ctggtgggtg gcaggaacag cactgggtac aggttacgtt 800
acagtggata ttttgggggt gttactgcc taagcagaga gcagtttttc 850
aaggatgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900

Sequence Listing - P3230R1C1.txt

tgacctcaga ctcaggggtg agctccaaag aatgaaaatt tcccggcccc 950
 tgcctgaagt gggtaaatat acaatgggtct tccacactag agacaaaggc 1000
 aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
 ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgtgg 1100
 aacacaatcc tttatatatc aacatcacag tggatttctg gtttgggtgca 1150
 tgaccctgga tcttttgggtg atgtttggaa gaactgattc tttgtttgca 1200
 ataattttgg cctagagact tcaaatagta gcacacatta agaacctgtt 1250
 acagctcatt gttgagctga atttttcctt tttgtatttt cttagcagag 1300
 ctctgggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350
 tcattttgat catgaggggtt aaatattgta atatggatac ttgaaggact 1400
 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
 tggttgaagg agattttatt aaatttgaag taatatatta tgggataaaa 1500
 ggccacagga aataagactg ctgaatgtct gagagaacca gagttgttct 1550
 cgtccaaggt agaaagggtac gaagatacaa tactgttatt catttatcct 1600
 gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650
 gaggggagaa aaggcgacga atcaggacac agtgaacttg ggaatgaaga 1700
 ggtagcagga ggggtggagtg tcggctgcaa aggcagcagt agctgagctg 1750
 gttgcaggtg ctgatagcct tcaggggagg acctgcccag gtatgccttc 1800
 cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
 tgtaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatattaac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42

<211> 344

<212> PRT

<213> Homo Sapien

<400> 42

Met	Gly	Phe	Asn	Leu	Thr	Phe	His	Leu	Ser	Tyr	Lys	Phe	Arg	Leu
1				5				10				15		

Leu	Leu	Leu	Leu	Thr	Leu	Cys	Leu	Thr	Val	Val	Gly	Trp	Ala	Thr
			20			25			30					

Sequence Listing - P3230R1C1.txt

Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
35 40 45

Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
50 55 60

Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
65 70 75

Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
80 85 90

Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
95 100 105

Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
110 115 120

Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
125 130 135

His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
140 145 150

Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
155 160 165

Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu
170 175 180

Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val
185 190 195

Asp Leu Val Pro Glu Asn Asp Phe Asn Leu Tyr Lys Cys Glu Glu
200 205 210

His Pro Lys His Leu Val Val Gly Arg Asn Ser Thr Gly Tyr Arg
215 220 225

Leu Arg Tyr Ser Gly Tyr Phe Gly Gly Val Thr Ala Leu Ser Arg
230 235 240

Glu Gln Phe Phe Lys Val Asn Gly Phe Ser Asn Asn Tyr Trp Gly
245 250 255

Trp Gly Gly Glu Asp Asp Asp Leu Arg Leu Arg Val Glu Leu Gln
260 265 270

Arg Met Lys Ile Ser Arg Pro Leu Pro Glu Val Gly Lys Tyr Thr
275 280 285

Met Val Phe His Thr Arg Asp Lys Gly Asn Glu Val Asn Ala Glu
290 295 300

Sequence Listing - P3230R1C1.txt

Arg Met Lys Leu Leu His Gln Val Ser Arg Val Trp Arg Thr Asp
305 310 315

Gly Leu Ser Ser Cys Ser Tyr Lys Leu Val Ser Val Glu His Asn
320 325 330

Pro Leu Tyr Ile Asn Ile Thr Val Asp Phe Trp Phe Gly Ala
335 340

<210> 43

<211> 485

<212> DNA

<213> Homo Sapien

<400> 43

gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50

gctccagat ctgggccgct tgctctctgc tctctctct cctcgccagc 100

ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150

gcaaccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200

agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250

ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300

acctgccctg cccccgtccc ctccttctct tatttattcc tgctgcccc 350

gaacataggt cttggaataa aatggctggt tctttgttt tccaaaaaaa 400

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu
1 5 10 15

Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Sequence Listing - P3230R1C1.txt

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100
gcctctggac ccgtgaaaga gctggtcggt tccgttggtg gggccgtgac 150
tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200
tcaacacaac cctcttgtc accatacagc cagaaggggg cactatcata 250
gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300
ctccctgaag ctacgcaaac tgaagaagaa tgactcaggg atctactatg 350
tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400
ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450
gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500
atggggaaga ggatgtgatt tatacttga aggccttggg gcaagcagcc 550
aatgagtccc ataatgggtc catcctcccc atctcttga gatggggaga 600
aagtgatatg acctcatct gcgttgccag gaaccctgtc agcagaaact 650
tctcaagccc catccttgcc aggaagctct gtgaagggtc tgctgatgac 700
ccagattcct ccattggtcct cctgtgtctc ctgttggtgc cctcctgct 750
cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900
tcacactaat agaacaatcc taaaggaaga tccagcaaact acggtttact 950
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
atgccagaca caccaaggct attgcctat gagaatgtta tctagacagc 1050
agtgactcc cctaagtctc tgctca 1076

<210> 46

Sequence Listing - P3230R1C1.txt

<211> 335

<212> PRT

<213> Homo Sapien

<400> 46

Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp
1 5 10 15

Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
20 25 30

Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
35 40 45

Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
50 55 60

Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
65 70 75

Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
80 85 90

Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
95 100 105

Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
110 115 120

Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
125 130 135

Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
140 145 150

Cys Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr Thr Trp Lys
155 160 165

Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn Gly Ser Ile Leu
170 175 180

Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys
185 190 195

Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu
200 205 210

Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser
215 220 225

Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln
245 250 255

Sequence Listing - P3230R1C1.txt

Glu Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
260 265 270

Thr Pro Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp
275 280 285

Thr Ile Pro His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala
290 295 300

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn
305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala
320 325 330

Tyr Glu Asn Val Ile
335

<210> 47

<211> 766

<212> DNA

<213> Homo Sapien

<400> 47

ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50

gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100

tttcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150

tctcaaaacc ccatctcttg ctttgagtgg tgggtcccag gaattatagg 200

agcaggctctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250

aaagagcgtg ctgcaacaac agaactggaa tgtttcttc atcatttttc 300

agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350

ggctctctta aaaggctctc tcatgtgtaa ttctcaagc aacagtaatg 400

ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450

ttcaactgc agtggtttt caatgactct tgtgcacctc ctactggttt 500

caataaacc accagtaacg acaccatggc gagtggctgg agagcatcta 550

gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600

gtatttttag gtctattgct tgttgaatt ctggagggtcc tgtttgggct 650

cagtcagata gtcacggtt tccttggtg tctgtgtgga gtctctaagc 700

gaagaagtca aattgtgtag ttaaatggga ataaatgta agtatcagta 750

gtttgaaaaa aaaaaa 766

Sequence Listing - P3230R1C1.txt

<210> 48

<211> 229

<212> PRT

<213> Homo Sapien

<400> 48

Met Thr Cys Cys Glu Gly Trp Thr Ser Cys Asn Gly Phe Ser Leu
1 5 10 15

Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu
20 25 30

Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
35 40 45

Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu
50 55 60

Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg
65 70 75

Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe
80 85 90

Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser
95 100 105

Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser
110 115 120

Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp
125 130 135

Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser
140 145 150

Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr
155 160 165

Met Ala Ser Gly Trp Arg Ala Ser Ser Phe His Phe Asp Ser Glu
170 175 180

Glu Asn Lys His Arg Leu Ile His Phe Ser Val Phe Leu Gly Leu
185 190 195

Leu Leu Val Gly Ile Leu Glu Val Leu Phe Gly Leu Ser Gln Ile
200 205 210

Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg
215 220 225

Ser Gln Ile Val

Sequence Listing - P3230R1C1.txt

<210> 49

<211> 636

<212> DNA

<213> Homo Sapien

<400> 49

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gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100
ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgacagcccc 150
cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
agagagtgac cctggccctt ctctactgg caggcctgac tgccttgga 250
gccaatgacc catttgccaa taaagacgat ccttctact atgactggaa 300
aaacctgcag ctgagcggac tgatctgcgg agggctctg gccattgctg 350
ggatcgcggc agttctgagt ggcaaatgca aatacaagag cagccagaag 400
cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450
tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
taacactggc cccagcacc tcctccctg ggaggcctta tcctcaagga 550
aggacttctc tccaagggca ggctgttagg ccccttctg atcaggaggc 600
ttctttatga attaaactcg cccaccacc ccctca 636

<210> 50

<211> 89

<212> PRT

<213> Homo Sapien

<400> 50

Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
1 5 10 15
Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe
20 25 30
Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly
35 40 45
Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys
50 55 60
Cys Lys Tyr Lys Ser Ser Gln Lys Gln His Ser Pro Val Pro Glu
65 70 75
Lys Ala Ile Pro Leu Ile Thr Pro Gly Ser Ala Thr Thr Cys
80 85

Sequence Listing - P3230R1C1.txt

<210> 51
<211> 1734
<212> DNA
<213> Homo Sapien

<400> 51
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gaccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
caaagaggcc ggaggggacag ctggctctaa agtcagttag gcccttggcc 400
aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
ggcgagcag atgctttggg caacagggtc ggggaagcag cccatgtctt 500
gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
acggagcaga tgctgtccgc ggctcctggc aggggggtgcc tggccacagt 600
ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaaggtag 650
ccttgagggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700
tccacggata ccccgaaac tcagcaggca gctttggaat gaatcctcag 750
ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
caacactcag ggagctgtgg cccagcctgg ctatggttca gtgagagcca 850
gcaaccagaa tgaaggggtc acgaatcccc caccatctgg ctgaggtgga 900
ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
agtggtagca gcagtggcaa cagtggtagc agcagaggtg acagcggcag 1100
tgagtctccc tggggatcca gcaccggctc ctctccggc aaccacggtg 1150
ggagcggcgg aggaaatgga cataaacccg ggtgtgaaaa gccagggaat 1200
gaagcccgcg ggagcgggga atctgggatt cagggcttca gaggacaggg 1250

Sequence Listing - P3230R1C1.txt

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gaggctctgg agacaattat cgggggcaag ggtcgagctg gggcagtgga 1350
ggaggtgacg ctgttggtgg agtcaatact gtgaactctg agacgtctcc 1400
tgggatgttt aactttgaca ctttctggaa gaattttaa tcgaagctgg 1450
gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500
ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
ccctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600
aaataaacct tagctgcccc acaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52

<211> 440

<212> PRT

<213> Homo Sapien

<400> 52

Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
1 5 10 15

Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
20 25 30

Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
35 40 45
Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
50 55 60

Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
65 70 75

Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
80 85 90

Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala
95 100 105

Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val
110 115 120

Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val
125 130 135

Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile
140 145 150

Sequence Listing - P3230R1C1.txt

Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln Gly Gln Gly Asn Pro
 155 160 165
 Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr Pro Gly Asn Ser
 170 175 180
 Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro Trp Gly Gln
 185 190 195
 Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr Gln Gly
 200 205 210
 Ala Val Ala Gln Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn Gln
 215 220 225
 Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly
 230 235 240
 Ser Ser Asn Ser Gly Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser
 245 250 255
 Gly Ser Gly Ser Asn Gly Asp Asn Asn Asn Gly Ser Ser Ser Gly
 260 265 270
 Gly Ser Ser Ser Gly Ser Ser Ser Gly Ser Ser Ser Gly Gly Ser
 275 280 285
 Ser Gly Gly Ser Ser Gly Gly Ser Ser Gly Asn Ser Gly Gly Ser
 290 295 300
 Arg Gly Asp Ser Gly Ser Glu Ser Ser Trp Gly Ser Ser Thr Gly
 305 310 315
 Ser Ser Ser Gly Asn His Gly Gly Ser Gly Gly Gly Asn Gly His
 320 325 330
 Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu Ala Arg Gly Ser Gly
 335 340 345
 Glu Ser Gly Ile Gln Gly Phe Arg Gly Gln Gly Val Ser Ser Asn
 350 355 360
 Met Arg Glu Ile Ser Lys Glu Gly Asn Arg Leu Leu Gly Gly Ser
 365 370 375
 Gly Asp Asn Tyr Arg Gly Gln Gly Ser Ser Trp Gly Ser Gly Gly
 380 385 390
 Gly Asp Ala Val Gly Gly Val Asn Thr Val Asn Ser Glu Thr Ser
 395 400 405
 Pro Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser
 410 415 420

Sequence Listing - P3230R1C1.txt

Lys Leu Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg
425 430 435

Ser Ser Arg Ile Pro
440

<210> 53

<211> 1676

<212> DNA

<213> Homo Sapien

<400> 53

ggagaagagg ttgtgtggga caagctgctc ccgacagaag gatgtcgctg 50
ctgagcctgc cctggctggg cctcagaccg gtggcaatgt ccccatggct 100
actctgctg ctggttgtgg gctctggct actgcccgc atctggctt 150
ggacctatgc cttctataac aactgccgcc ggctccagtg tttccacag 200
ccccaaaac ggaactgggt ttggggtcac ctgggcctga tcactcctac 250
agaggagggc ttgaaggact cgaccagat gtcggccacc tattccagg 300
gctttacggt atggctgggt cccatcatcc cttcatcgt tttatgccac 350
cctgacacca tccggtctat caccaatgcc tcagctgcca ttgacccaa 400
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tgctgagtgg cggtgacaag tggagccgcc accgtcggat gctgacgccc 500
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cagaaatgca tttcagctt tgacagccat tgtcaggaga ggcccagtga 700
atatattgcc accatcttgg agctcagtgc cttgtagag aaaagaagcc 750
agcatatcct ccagcacatg gactttctgt attaccttc ccatgacggg 800
cggcgcttcc acagggcctg ccgcctgggt catgacttca cagacgctgt 850
catccgggag cggcgtcgca cctcccccac tcagggtatt gatgatttt 900
tcaaagacaa agccaagtcc aagactttgg atttcattga tgtgcttctg 950
ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
agaggctgac acctcatgt ttggaggcca tgacaccacg gccagtggcc 1050
tctctgggt cctgtacaac cttgcgaggc acccagaata ccaggagcgc 1100

Sequence Listing - P3230R1C1.txt

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tgaatgggac gacctggccc agctgccctt cctgaccatg tgcgtgaagg 1200
agagcctgag gttacatccc ccagctccct tcattctccg atgctgcacc 1250
caggacattg ttctcccaga tggccgagtc atcccaaag gcattacctg 1300
cctcatcgat attatagggg tccatcaca cccaactgtg tggccggatc 1350
ctgaggtcta cgacccttc cgcttgacc cagagaacag caaggggagg 1400
tcacctctgg cttttattcc ttctccgca gggcccagga actgcatcgg 1450
gcaggcgctt gccatggcgg agatgaaagt ggtcctggcg ttgatgctgc 1500
tgcacttcg gttctgcca gaccactg agccccgag gaagctggaa 1550
ttgatcatgc gcgccgagg cgggctttg ctgcgggtg agccctgaa 1600
tgtaggcttg cagtacttt ctgaccatc cacctgttt ttgcagatt 1650
gtcatgaata aaacggtgct gtcaaa 1676

<210> 54

<211> 524

<212> PRT

<213> Homo Sapien

<400> 54

Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala
1 5 10 15

Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu
20 25 30

Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys
35 40 45

Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
50 55 60

Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
65 70 75

Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
80 85 90

Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
95 100 105

Thr Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys
110 115 120

Asp Asn Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly
125 130 135

Sequence Listing - P3230R1C1.txt

```

Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met
    140          145          150

Leu Thr Pro Ala Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr
    155          160          165

Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp Lys Trp Gln His
    170          175          180

Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile
    185          190          195

Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe
    200          205          210

Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile
    215          220          225

Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu
    230          235          240

Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg
    245          250          255

Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val
    260          265          270

Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp
    275          280          285

Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp
    290          295          300

Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp
    305          310          315

Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His
    320          325          330

Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala
    335          340          345

Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu
    350          355          360

Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu
    365          370          375

Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg
    380          385          390

Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp
    395          400          405

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Sequence Listing - P3230R1C1.txt

Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys
410 415 420

Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro
425 430 435

Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser
440 445 450

Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro
455 460 465

Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val
470 475 480

Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His
485 490 495

Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly
500 505 510

Gly Leu Trp Leu Arg Val Glu Pro Leu Asn Val Gly Leu Gln
515 520

<210> 55

<211> 644

<212> DNA

<213> Homo Sapien

<400> 55

atcgcatcaa ttgggagtag catcttcctc atgggaccag tgaaacagct 50

gaagcgaatg tttagccta ctcgtttgat tgcaactatc atggtgctgt 100

tgtgttttgc acttaccctg tgttctgcct ttgggtggca taacaaggga 150

cttgactta tcttctgcat ttgcagtct ttggcattga cgtggtacag 200

ccttccttc ataccattg caagggatgc tgtgaagaag tgttttgccg 250

tgtgtcttgc ataattcatg gccagtttta tgaagctttg gaaggcacta 300

tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350

tacagacatg tgccttttat ctgcagcaa tgtgttgctt gtgattcgaa 400

catttgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450

cagtagcaca gtaggagaag tgggttctgt atcttggtga gtggaatctt 500

cctcatgtac ctgttctc tctggatgtt gtccactga attccatga 550

atacaaacct attcagcaac agcaaaaaaa aaaaaaaaaa aaaaaaaaaa 600

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

Sequence Listing - P3230R1C1.txt

<210> 56

<211> 77

<212> PRT

<213> Homo Sapien

<400> 56

Met Gly Pro Val Lys Gln Leu Lys Arg Met Phe Glu Pro Thr Arg
1 5 10 15

Leu Ile Ala Thr Ile Met Val Leu Leu Cys Phe Ala Leu Thr Leu
20 25 30

Cys Ser Ala Phe Trp Trp His Asn Lys Gly Leu Ala Leu Ile Phe
35 40 45

Cys Ile Leu Gln Ser Leu Ala Leu Thr Trp Tyr Ser Leu Ser Phe
50 55 60

Ile Pro Phe Ala Arg Asp Ala Val Lys Lys Cys Phe Ala Val Cys
65 70 75

Leu Ala

<210> 57

<211> 3334

<212> DNA

<213> Homo Sapien

<400> 57

cggtctgagc tcgagccgaa tcggctcgag gggcagtgga gcaccagca 50

ggccgccaac atgctctgtc tgtgcctgta cgtgccggtc atcggggaag 100

cccagaccga gttccagtac tttagtcga aggggctccc tgccgagctg 150

aagtccattt tcaagctcag tgtcttcac cctcccagg aattctccac 200

ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250

atgggcagct agactttgaa gaattgtcc attatctca agatcatgag 300

aagaagctga ggctggtgtt taagatttg gacaaaaaga atgatggacg 350

cattgacgcg caggagatca tgcagtcct gcgggacttg ggagtcaaga 400

tatctgaaca gcaggcagaa aaaattctca agagcatgga taaaaacggc 450

acgatgacca tcgactggaa cgagtggaga gactaccacc tctccaccc 500

cgtggaaaac atccccgaga tcattctta ctggaagcat tccacgatct 550

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aggcagacgg ggatgtggtg gagacacctg gtggcaggag gtggggcagg 650

Sequence Listing - P3230R1C1.txt

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tgcagggtcca tgcctcccgc agcaacaaca tgggcatcgt tgggtggcttc 750
actcagatga ttcgagaagg agggggccagg tcactctggc ggggcaatgg 800
catcaacgtc ctcaaattg cccccgaatc agccatcaaa ttcatggcct 850
atgagcagat caagcgcctt gttggtagt accaggagac tctgaggatt 900
cacgagaggc ttgtggcagg gtccttggca ggggcatcg cccagagcag 950
catctacca atggagggtcc tgaagaccg gatggcgctg cggaagacag 1000
gccagtactc aggaatgctg gactgcgcca ggaggatcct ggccagagag 1050
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cccctatgcc ggcacgacc ttgcagtcta cgagacgctc aagaatgcct 1150
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ctggcctgtg gcaccatgtc cagtacctgt ggccagctgg ccagctaccc 1250
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ctccggaggt gaccatgagc agcctcttca aacatatcct gcggaccgag 1350
ggggccttcg ggctgtacag ggggctggcc ccaacttca tgaaggcat 1400
cccagctgtg agcatcagct acgtggtcta cgagaacctg aagatcacc 1450
tgggcgtgca gtcgcggtga cggggggagg gccgcccggc agtggactcg 1500
ctgatcctgg gccgcagcct ggggtgtgca gccatctcat tctgtgaatg 1550
tgccaacact aagctgtctc gagccaagct gtgaaaacc tagacgcacc 1600
cgcagggagg gtggggagag ctggcaggcc cagggttgt cctgctgacc 1650
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taagggtgga ggagggtac agccacatc ccacccctc gtccaatccc 1950
ataatccatg atgaaagggt aggtcacgtg gcctcccagg cctgacttcc 2000
caacctacag cattgacgcc aacttggtg tgaaggaaga ggaaaggatc 2050

Sequence Listing - P3230R1C1.txt

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ataaagttgt ttcaaagctg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3300
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3334

<210> 58
<211> 469

Sequence Listing - P3230R1C1.txt

<212> PRT

<213> Homo Sapien

<400> 58

Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln
1 5 10 15

Thr Glu Phe Gln Tyr Phe Glu Ser Lys Gly Leu Pro Ala Glu Leu
20 25 30

Lys Ser Ile Phe Lys Leu Ser Val Phe Ile Pro Ser Gln Glu Phe
35 40 45

Ser Thr Tyr Arg Gln Trp Lys Gln Lys Ile Val Gln Ala Gly Asp
50 55 60

Lys Asp Leu Asp Gly Gln Leu Asp Phe Glu Glu Phe Val His Tyr
65 70 75

Leu Gln Asp His Glu Lys Lys Leu Arg Leu Val Phe Lys Ile Leu
80 85 90

Asp Lys Lys Asn Asp Gly Arg Ile Asp Ala Gln Glu Ile Met Gln
95 100 105

Ser Leu Arg Asp Leu Gly Val Lys Ile Ser Glu Gln Gln Ala Glu
110 115 120

Lys Ile Leu Lys Ser Met Asp Lys Asn Gly Thr Met Thr Ile Asp
125 130 135

Trp Asn Glu Trp Arg Asp Tyr His Leu Leu His Pro Val Glu Asn
140 145 150

Ile Pro Glu Ile Ile Leu Tyr Trp Lys His Ser Thr Ile Phe Asp
155 160 165

Val Gly Glu Asn Leu Thr Val Pro Asp Glu Phe Thr Val Glu Glu
170 175 180

Arg Gln Thr Gly Met Trp Trp Arg His Leu Val Ala Gly Gly Gly
185 190 195

Ala Gly Ala Val Ser Arg Thr Cys Thr Ala Pro Leu Asp Arg Leu
200 205 210

Lys Val Leu Met Gln Val His Ala Ser Arg Ser Asn Asn Met Gly
215 220 225

Ile Val Gly Gly Phe Thr Gln Met Ile Arg Glu Gly Gly Ala Arg
230 235 240

Ser Leu Trp Arg Gly Asn Gly Ile Asn Val Leu Lys Ile Ala Pro
245 250 255

Sequence Listing - P3230R1C1.txt

Glu Ser Ala Ile Lys Phe Met Ala Tyr Glu Gln Ile Lys Arg Leu
260 265 270

Val Gly Ser Asp Gln Glu Thr Leu Arg Ile His Glu Arg Leu Val
275 280 285

Ala Gly Ser Leu Ala Gly Ala Ile Ala Gln Ser Ser Ile Tyr Pro
290 295 300

Met Glu Val Leu Lys Thr Arg Met Ala Leu Arg Lys Thr Gly Gln
305 310 315

Tyr Ser Gly Met Leu Asp Cys Ala Arg Arg Ile Leu Ala Arg Glu
320 325 330

Gly Val Ala Ala Phe Tyr Lys Gly Tyr Val Pro Asn Met Leu Gly
335 340 345

Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Thr Leu
350 355 360

Lys Asn Ala Trp Leu Gln His Tyr Ala Val Asn Ser Ala Asp Pro
365 370 375

Gly Val Phe Val Leu Leu Ala Cys Gly Thr Met Ser Ser Thr Cys
380 385 390

Gly Gln Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met
395 400 405

Gln Ala Gln Ala Ser Ile Glu Gly Ala Pro Glu Val Thr Met Ser
410 415 420

Ser Leu Phe Lys His Ile Leu Arg Thr Glu Gly Ala Phe Gly Leu
425 430 435

Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val
440 445 450

Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly
455 460 465

Val Gln Ser Arg

<210> 59

<211> 1658

<212> DNA

<213> Homo Sapien

<400> 59

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ttccccagcc atggcttccc tggggcagat cctcttctgg agcataatta 100

Sequence Listing - P3230R1C1.txt

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atttcagga gacactccat cacagtcact actgtcgct cagctggga 200
cattggggag gatggaatcc tgagctgcac tttgaacct gacatcaaac 250
tttctgatat cgtgatacaa tggctgaagg aagggtgttt aggcttggtc 300
catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatgtt 350
cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
ctttgcggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
tatatcatca cttctaaagg caaggggaat gctaaccttg agtataaac 500
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agaccttgcg gtgtgaggct ccccgatggt tccccagcc cacagtgggtc 600
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ctaaaataat gtgccttggc cacaaaaaag catgcaaagt cattgttaca 950
acagggatct acagaactat tccaccacca gatatgacct agttttatat 1000
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agcaagaaac aaaaagaagc caaagcaga aggtccaat atgaacaaga 1100
taaattctatc ttcaaagaca tattagaagt tgggaaaata attcatgtga 1150
actagacaag tgtgttaaga gtgataagta aatgcacgt ggagacaagt 1200
gcatccccag atctcagga cctccccctg cctgtcacct ggggagtgag 1250
aggacaggat agtgcagtgt cttgtctct gaatttttag ttatatgtgc 1300
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catcttatat tccacaaatt aagctgtagt atgtacccta agacgctgct 1400
aattgactgc cacttcgaa ctcaggggcg gctgcatttt agtaatgggt 1450
caaatgattc acttttatg atgcttcaa aggtgccttg gcttctcttc 1500

Sequence Listing - P3230R1C1.txt

ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaaa 1658

<210> 60
<211> 282
<212> PRT
<213> Homo Sapien

<400> 60
Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile
1 5 10 15
Ile Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly
20 25 30
Ile Ser Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala
35 40 45
Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro
50 55 60
Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly
65 70 75
Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu
80 85 90
Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala
95 100 105
Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
110 115 120
Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser
125 130 135
Lys Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe
140 145 150
Ser Met Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr
155 160 165
Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val
170 175 180
Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser
185 190 195
Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met Lys Val
200 205 210

Sequence Listing - P3230R1C1.txt

Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser Cys
215 220 225

Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
230 235 240

Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn
245 250 255

Ser Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp
260 265 270

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
275 280

<210> 61

<211> 1617

<212> DNA

<213> Homo Sapien

<400> 61

tgacgtcaga atcacatgg ccagctatcc ttaccggcag ggctgcccag 50
gagctgcagg acaagcacca ggagcccctc cgggtagcta ctaccctgga 100
cccccaata gtggagggca gtatggtagt gggctacccc ctggtggtgg 150
ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200
ggccctatgg acacccaat cctgggatgt tcccctctgg aactccagga 250
ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
aagttctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
ctcccaatgt ggatcctgag gcctactcct ggttcagtc ggtggactca 400
gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctgggtcaa 450
ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
tgtttgacaa gaccaagtca ggccgcatcg atgtctacgg cttctcagcc 550
ctgtggaaat tcatccagca gtggaagaac ctcttcagc agtatgaccg 600
ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
aatggggcta caactgagc cccagttca cccagcttct ggtctccgc 700
tactgccac gctctgcaa tctgcatg cagcttgacc gttcatcca 750
ggtgtgcacc cagctgcagg tgctgacaga ggccttcgg gagaaggaca 800
cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcacatg 850

Sequence Listing - P3230R1C1.txt

acagcttctc ggatgctatg acccaacat ctgtggagag tggagtgcac 900
cagggacctt tcctggcttc ttagagttag agaagtatgt ggacatctct 950
tcttttctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
gttccaaaag aggggtggaga gtcctgcac atagccacca aatagtgagg 1050
accggggctg aggccacaca gatagggggc tgatggagga gaggatagaa 1100
gttgaatgct ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agctccaccc 1200
tgatgccagt ggtgagtgtt catcggcctg ttaccgtag tacctgtgtt 1250
ccctcaccag gccatcctgt caaacgagcc cattttctcc aaagtggaat 1300
ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
gccacacca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
cctgctcaga caaatctgct ccctgggcat ctttgccag gcttctgccc 1450
cctgcagctg ggaccctca cttgcctgcc atgctctgct cggcttcagt 1500
ctccaggaga cagtgggtcac ctctccctgc caatactttt ttaatttgc 1550
atttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
aaaggatgaa actctga 1617

<210> 62

<211> 284

<212> PRT

<213> Homo Sapien

<400> 62

Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly
1 5 10 15

Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
20 25 30

Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
35 40 45

Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
50 55 60

Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
65 70 75

Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr

Sequence Listing - P3230R1C1.txt

80 85 90

Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu
95 100 105

Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr
110 115 120

Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser
125 130 135

Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser
140 145 150

Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys
155 160 165

Thr Lys Ser Gly Arg Ile Asp Val Tyr Gly Phe Ser Ala Leu Trp
170 175 180

Lys Phe Ile Gln Gln Trp Lys Asn Leu Phe Gln Gln Tyr Asp Arg
185 190 195

Asp Arg Ser Gly Ser Ile Ser Tyr Thr Glu Leu Gln Gln Ala Leu
200 205 210

Ser Gln Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln Leu Leu
215 220 225

Val Ser Arg Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln Leu
230 235 240

Asp Arg Phe Ile Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu
245 250 255

Ala Phe Arg Glu Lys Asp Thr Ala Val Gln Gly Asn Ile Arg Leu
260 265 270

Ser Phe Glu Asp Phe Val Thr Met Thr Ala Ser Arg Met Leu
275 280

<210> 63

<211> 1234

<212> DNA

<213> Homo Sapien

<400> 63

caggatgcag ggccgcgtgg cagggagctg cgctcctctg ggcctgctcc 50

tggtctgtct tcattcccca ggcctctttg cccggagcat cgggtgtgtg 100
gaggagaaag ttcccaaaa ctccgggacc aactgcctc agctcggaca 150

accttctcc actggcccct ctaactctga acatccgcag cccgctctgg 200

accctagggtc taatgacttg gcaaggggtc ctctgaagct cagcgtgcct 250

Sequence Listing - P3230R1C1.txt

```

ccatcagatg gcttcccacc tgcaggaggt tctgcagtgc agaggtggcc 300
tccatcgtgg gggctgcctg ccatggattc ctggccccct gaggatcctt 350
ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgctgcct 400
gaagaactct cttaccttc cagtgtgctg gccctcgtc cgggcagtgg 450
ccctttgcct ggggagctt cttccgatgc cacaggcctc tcacctgagg 500
cttacctct ccaccaggac tcggagtcca gacgactgcc ccgttcta 550
tactgggag ccgggggaaa aatcctttcc caacgccctc cctggtctt 600
catccacagg gttctgcctg atcaccctg gggtagcctg aatccagt 650
tgtctgggg aggtggaggc cctgggactg gttggggaac gaggccatg 700
ccacaccctg agggaatctg gggtagaat aatcaacccc caggtagcag 750
ctggggaaat attaatcgtt atccaggagg cagtgggga aatattaatc 800
ggtagcagg aggcagctgg ggggaatatta atcggtatcc aggaggcagc 850
tgggggaata ttcactata ccaggtatc aataacccat ttcctctgg 900
agtctccgc cctctggct cttctggaa catccagct ggcttccta 950
atcctccaag ccctagggtg cagtggggct agagcacgat agagggaac 1000
ccaacattgg gagtagagt cctgctccg ccccttgctg tgtgggtca 1050
atccaggccc tgtaacatg tttccagcac tatccccact ttcagtgc 1100
tcccctgctc atctcaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

```

<210> 64

<211> 325

<212> PRT

<213> Homo Sapien

<400> 64

```

Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
 1         5         10        15

```

```

Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
    20        25        30

```

```

Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
    35        40        45

```


Sequence Listing - P3230R1C1.txt

Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
50 55 60

Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
65 70 75

Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
80 85 90

Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
95 100 105

Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
110 115 120

Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
125 130 135

Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
140 145 150

Leu Pro Gly Glu Ser Ser Pro Asp Ala Thr Gly Leu Ser Pro Glu
155 160 165

Ala Ser Leu Leu His Gln Asp Ser Glu Ser Arg Arg Leu Pro Arg
170 175 180

Ser Asn Ser Leu Gly Ala Gly Gly Lys Ile Leu Ser Gln Arg Pro
185 190 195

Pro Trp Ser Leu Ile His Arg Val Leu Pro Asp His Pro Trp Gly
200 205 210

Thr Leu Asn Pro Ser Val Ser Trp Gly Gly Gly Gly Pro Gly Thr
215 220 225

Gly Trp Gly Thr Arg Pro Met Pro His Pro Glu Gly Ile Trp Gly
230 235 240

Ile Asn Asn Gln Pro Pro Gly Thr Ser Trp Gly Asn Ile Asn Arg
245 250 255

Tyr Pro Gly Gly Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly
260 265 270

Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly Ser Trp Gly Asn
275 280 285

Ile His Leu Tyr Pro Gly Ile Asn Asn Pro Phe Pro Pro Gly Val
290 295 300

Leu Arg Pro Pro Gly Ser Ser Trp Asn Ile Pro Ala Gly Phe Pro
305 310 315

Asn Pro Pro Ser Pro Arg Leu Gln Trp Gly

Sequence Listing - P3230R1C1.txt

320

325

<210> 65

<211> 422

<212> DNA

<213> Homo Sapien

<400> 65

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 ggccactatg gggctctgggc tgccccttgt cctcctcttg accctccttg 100
 gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
 gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgctctctcc tccatctccc ttcagggacc agcgtcaccc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct tttgggccgg ggatgcagga 350
 ggcaggcccc gacctgtct ttcagcaggc cccaccctc ctgagtggca 400
 ataaataaaa ttcggtatgc tg 422

<210> 66

<211> 78

<212> PRT

<213> Homo Sapien

<400> 66

Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
 1 5 10 15
 Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
 20 25 30
 Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
 35 40 45
 Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
 50 55 60
 Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
 65 70 75
 Cys Asn Thr

<210> 67

<211> 744

<212> DNA

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 67

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 caaagacgcc cgggccaggt gccccgtcgc aggtgccctt ggccggagat 100
 gcggtaggag gggcgagcgc gagaagcccc ttctcggcg ctgccaaccc 150
 gccaccagc ccatggcgaa ccccgggctg gggctgctt tggcgctggg 200
 cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250
 ccacttctgc aaatgagaat agcactgttt tgccttcac caccagctcc 300
 agctccgatg gcaacctgcg tccggaagcc atcactgcta tcacgtggt 350
 cttctccctc ttggctgcct tgctctggc tgtggggctg gcactgttg 400
 tgcggaagct tcgggagaag cggcagacgg agggcaccta ccggcccagt 450
 agcgaggagc agttctcca tgcagccgag gcccgggccc ctcaggactc 500
 caaggagacg gtgcagggct gcctgccat ctaggcccc tctctgcat 550
 ctgtctccct tcattgctgt gtgaccttg ggaaaggcag tgcctctct 600
 gggcagtcag atccaccag tgcttaatag cagggaagaa ggtactcaa 650
 agactctgcc cctgaggta agagaggatg gggctattca ctttatata 700
 tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68

<211> 123

<212> PRT

<213> Homo Sapien

<400> 68

Met Ala Asn Pro Gly Leu Gly Leu Leu Ala Leu Gly Leu Pro
 1 5 10 15
 Phe Leu Leu Ala Arg Trp Gly Arg Ala Trp Gly Gln Ile Gln Thr
 20 25 30
 Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
 35 40 45
 Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
 50 55 60
 Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
 65 70 75
 Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
 80 85 90
 Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala

Sequence Listing - P3230R1C1.txt

95 100 105

Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
110 115 120

Leu Pro Ile

<210> 69

<211> 3265

<212> DNA

<213> Homo Sapien

<400> 69

gccaggaata actagagagg aacaatgggg ttattcagag gttttgttt 50
cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcattaagc 100

tgaataataa tggccttgaa gatattgtca ttgttataga tcctagtgtg 150

ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200

ttctacgtac ctgttggaag ccacagaaaa aagatttttt ttcaaaaatg 250

tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300

ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400

agaaaggcga atacattcac ttcaccctg accttctact tggaaaaaaa 450

caaatgaat atggaccacc aggcaaactg tttgtccatg agtggggtca 500

cctccggtgg ggagtgttg atgagtacaa tgaagatcag cctttctacc 550

gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600

ggtagaaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650

atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700

ttctgataa agtacaaaca gaaaaagcat ccataatgtt tatgcaaagt 750

attgattctg ttgttgaatt ttgtaacgaa aaaaccata atcaagaagc 800

tccaagccta caaacataa agtgcaattt tagaagtaca tgggaggtga 850

ttagcaattc tgaggatttt aaaaacacca taccatggt gacaccacct 900

cctccacctg tcttctcatt gctgaagatc agtcaaagaa ttgtgtgctt 950

agttcttgat aagtctggaa gcatgggggg taaggaccgc ctaaatcgaa 1000

tgaatcaagc agcaaaacat ttctgctgc agactgttga aaatggatcc 1050

Sequence Listing - P3230R1C1.txt

tgggtgggga tggttcactt tgatagtact gccactattg taaataagct 1100
aatccaaata aaaagcagtg atgaaagaaa cacactcatg gcaggattac 1150
ctacatatcc tctgggagga acttccatct gctctggaat taaatatgca 1200
tttcagggtga ttggagagct acattcccaa ctcgatggat ccgaagtact 1250
gctgctgact gatggggagg ataacactgc aagttcttgt attgatgaag 1300
tgaaacaaag tggggccatt gttcatttta ttgctttggg aagagctgct 1350
gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttta 1400
tgtttcagat gaagctcaga acaatggcct cattgatgct tttggggctc 1450
ttacatcagg aaatactgat ctctcccaga agtcccttca gctcgaaagt 1500
aagggattaa cactgaatag taatgcctgg atgaacgaca ctgtcataat 1550
tgatagtaca gtgggaaagg acacgttctt tctcatcaca tggaacagtc 1600
tgctccag tatttctctc tgggatcca gtggaacaat aatggaaaat 1650
ttcacagtgg atgcaacttc caaatggcc tatctcagta ttccaggaac 1700
tgcaaagggtg ggcacttggg cataaatct tcaagccaaa gcgaaccag 1750
aaacattaac tattacagta acttctcgag cagcaaattc ttctgtgcct 1800
ccaatcacag tgaatgctaa aatgaataag gacgtaaaca gtttcccag 1850
cccaatgatt gtttacgcag aaattctaca aggatatgta cctgttcttg 1900
gagccaatgt gactgcttc attgaatcac agaattggaca tacagaagtt 1950
ttggaacttt tggataatgg tgcaggcgct gattcttca agaattgatg 2000
agtctactcc aggtatttta cagcatatac agaaaatggc agatatagct 2050
taaaagttcg ggctcatgga ggagcaaaca ctgccaggct aaaattacgg 2100
cctccactga atagagccgc gtacatacca ggctgggtag tgaacgggga 2150
aattgaagca aaccgcgcaa gacctgaaat tgatgaggat actcagacca 2200
ccttgaggga tttcagccga acagcatccg gaggtgcatt tgtggtatca 2250
caagtccaa gccttccctt gcctgaccaa taccaccaa gtcaaatcac 2300
agacctgat gccacagttc atgaggataa gattattctt acatggacag 2350
caccaggaga taattttgat gttggaaaag ttcaacgtta ttcataaga 2400
ataagtgcaa gtattcttga tctaagagac agttttgatg atgctcttca 2450

Sequence Listing - P3230R1C1.txt

agtaaatact actgatctgt caccaaagga ggccaactcc aaggaaagct 2500
 ttgcatttaa accagaaaat atctcagaag aaaatgcaac ccacatattt 2550
 attgccatta aaagtataga taaaagcaat ttgacatcaa agtatccaa 2600
 cattgcacaa gtaactttgt ttatccctca agcaaactct gatgacattg 2650
 atcctacacc tactcctact cctactccta ctctgataa aagtcataat 2700
 tctggagtta atatttctac gctggattg tctgtgattg ggtctgttgt 2750
 aattgttaac tttattttaa gtaccacat ttgaacctta acgaagaaaa 2800
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 gtaaaggata tttctgaatc ttaaattca tcccatgtgt gatcataaac 2900
 tcataaaaat aattttaaga tgtcggaaaa ggatactttg attaaataaa 2950
 aacactcatg gatatgtaaa aactgtcaag attaaaattt aatagtttca 3000
 tttatttgtt attttatttg taagaaatag tgatgaacaa agatcctttt 3050
 tcatactgat acctggttgt atattatttg atgcaacagt tttctgaaat 3100
 gatatttcaa attgcatcaa gaaattaaaa tcatttatct gagtagtcaa 3150
 aatacaagta aaggagagca aataacaac atttgaaaa aaaaaaaaaa 3200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250
 aaaaaaaaaa aaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met Gly Leu Phe Arg Gly Phe Val Phe Leu Leu Val Leu Cys Leu
 1 5 10 15

Leu His Gln Ser Asn Thr Ser Phe Ile Lys Leu Asn Asn Asn Gly
 20 25 30

Phe Glu Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp
 35 40 45

Glu Lys Ile Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser
 50 55 60

Thr Tyr Leu Phe Glu Ala Thr Glu Lys Arg Phe Phe Phe Lys Asn
 65 70 75

Sequence Listing - P3230R1C1.txt

Val Ser Ile Leu Ile Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr
80 85 90

Lys Arg Pro Lys His Glu Asn His Lys His Ala Asp Val Ile Val
95 100 105

Ala Pro Pro Thr Leu Pro Gly Arg Asp Glu Pro Tyr Thr Lys Gln
110 115 120

Phe Thr Glu Cys Gly Glu Lys Gly Glu Tyr Ile His Phe Thr Pro
125 130 135

Asp Leu Leu Leu Gly Lys Lys Gln Asn Glu Tyr Gly Pro Pro Gly
140 145 150

Lys Leu Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe
155 160 165

Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg Ala Lys Ser Lys
170 175 180

Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser Gly Arg Asn
185 190 195

Arg Val Tyr Lys Cys Gln Gly Gly Ser Cys Leu Ser Arg Ala Cys
200 205 210

Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln Phe
215 220 225

Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met
230 235 240

Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His
245 250 255

Asn Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg
260 265 270

Ser Thr Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr
275 280 285

Ile Pro Met Val Thr Pro Pro Pro Pro Val Phe Ser Leu Leu
290 295 300

Lys Ile Ser Gln Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly
305 310 315

Ser Met Gly Gly Lys Asp Arg Leu Asn Arg Met Asn Gln Ala Ala
320 325 330

Lys His Phe Leu Leu Gln Thr Val Glu Asn Gly Ser Trp Val Gly
335 340 345

Met Val His Phe Asp Ser Thr Ala Thr Ile Val Asn Lys Leu Ile

Sequence Listing - P3230R1C1.txt

350	355	360
Gln Ile Lys Ser Ser Asp	Glu Arg Asn Thr	Leu Met Ala Gly Leu
365	370	375
Pro Thr Tyr Pro Leu Gly	Gly Thr Ser Ile	Cys Ser Gly Ile Lys
380	385	390
Tyr Ala Phe Gln Val Ile	Gly Glu Leu His	Ser Gln Leu Asp Gly
395	400	405
Ser Glu Val Leu Leu Leu	Thr Asp Gly Glu	Asp Asn Thr Ala Ser
410	415	420
Ser Cys Ile Asp Glu Val	Lys Gln Ser Gly	Ala Ile Val His Phe
425	430	435
Ile Ala Leu Gly Arg Ala	Ala Asp Glu Ala	Val Ile Glu Met Ser
440	445	450
Lys Ile Thr Gly Gly Ser	His Phe Tyr Val	Ser Asp Glu Ala Gln
455	460	465
Asn Asn Gly Leu Ile Asp	Ala Phe Gly Ala	Leu Thr Ser Gly Asn
470	475	480
Thr Asp Leu Ser Gln Lys	Ser Leu Gln Leu	Glu Ser Lys Gly Leu
485	490	495
Thr Leu Asn Ser Asn Ala	Trp Met Asn Asp	Thr Val Ile Ile Asp
500	505	510
Ser Thr Val Gly Lys Asp	Thr Phe Phe Leu	Ile Thr Trp Asn Ser
515	520	525
Leu Pro Pro Ser Ile Ser	Leu Trp Asp Pro	Ser Gly Thr Ile Met
530	535	540
Glu Asn Phe Thr Val Asp	Ala Thr Ser Lys	Met Ala Tyr Leu Ser
545	550	555
Ile Pro Gly Thr Ala Lys	Val Gly Thr Trp	Ala Tyr Asn Leu Gln
560	565	570
Ala Lys Ala Asn Pro Glu	Thr Leu Thr Ile	Thr Val Thr Ser Arg
575	580	585
Ala Ala Asn Ser Ser Val	Pro Pro Ile Thr	Val Asn Ala Lys Met
590	595	600
Asn Lys Asp Val Asn Ser	Phe Pro Ser Pro	Met Ile Val Tyr Ala
605	610	615
Glu Ile Leu Gln Gly Tyr	Val Pro Val Leu	Gly Ala Asn Val Thr
620	625	630

Sequence Listing - P3230R1C1.txt

Ala Phe Ile Glu Ser Gln Asn Gly His Thr Glu Val Leu Glu Leu
 635 640 645
 Leu Asp Asn Gly Ala Gly Ala Asp Ser Phe Lys Asn Asp Gly Val
 650 655 660
 Tyr Ser Arg Tyr Phe Thr Ala Tyr Thr Glu Asn Gly Arg Tyr Ser
 665 670 675
 Leu Lys Val Arg Ala His Gly Gly Ala Asn Thr Ala Arg Leu Lys
 680 685 690
 Leu Arg Pro Pro Leu Asn Arg Ala Ala Tyr Ile Pro Gly Trp Val
 695 700 705
 Val Asn Gly Glu Ile Glu Ala Asn Pro Pro Arg Pro Glu Ile Asp
 710 715 720
 Glu Asp Thr Gln Thr Thr Leu Glu Asp Phe Ser Arg Thr Ala Ser
 725 730 735
 Gly Gly Ala Phe Val Val Ser Gln Val Pro Ser Leu Pro Leu Pro
 740 745 750
 Asp Gln Tyr Pro Pro Ser Gln Ile Thr Asp Leu Asp Ala Thr Val
 755 760 765
 His Glu Asp Lys Ile Ile Leu Thr Trp Thr Ala Pro Gly Asp Asn
 770 775 780
 Phe Asp Val Gly Lys Val Gln Arg Tyr Ile Ile Arg Ile Ser Ala
 785 790 795
 Ser Ile Leu Asp Leu Arg Asp Ser Phe Asp Asp Ala Leu Gln Val
 800 805 810
 Asn Thr Thr Asp Leu Ser Pro Lys Glu Ala Asn Ser Lys Glu Ser
 815 820 825
 Phe Ala Phe Lys Pro Glu Asn Ile Ser Glu Glu Asn Ala Thr His
 830 835 840
 Ile Phe Ile Ala Ile Lys Ser Ile Asp Lys Ser Asn Leu Thr Ser
 845 850 855
 Lys Val Ser Asn Ile Ala Gln Val Thr Leu Phe Ile Pro Gln Ala
 860 865 870
 Asn Pro Asp Asp Ile Asp Pro Thr Pro Thr Pro Thr Pro
 875 880 885
 Thr Pro Asp Lys Ser His Asn Ser Gly Val Asn Ile Ser Thr Leu
 890 895 900

Sequence Listing - P3230R1C1.txt

Val Leu Ser Val Ile Gly Ser Val Val Ile Val Asn Phe Ile Leu
 905 910 915

Ser Thr Thr Ile

<210> 71

<211> 3877

<212> DNA

<213> Homo Sapien

<400> 71

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 aagaccatac gtccccgggc aggggtgaca acaggtgtca tctttttgat 100
 ctctgtgtg gctgccttcc tatttcaagg aaagacgccca aggtaatttt 150
 gaccagagg agcaatgatg tagccacctc ctaaccttcc cttcttgaac 200
 cccagttat gccaggattt actagagagt gtcaactcaa ccagcaagcg 250
 gctccttcgg cttacttgt ggttgaggga gagaacctt gtggggctgc 300
 gttctcttag cagtgtcag aagtgactg cctgaggggtg gaccagaaga 350
 aaggaaaggt cccctcttgc tgttggtgc acatcaggaa ggctgtgatg 400
 ggaatgaagg tgaacttg gagatttcac ttcagtcatt gcttctgcct 450
 gcaagatcat cctttaaag tagagaagct gctctgtgtg gtggttaact 500
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 ggcccaaac gcattcttcc tgtggtctag ccaggggaag ccctccgtg 600
 ggggccccgg cttgagggga tgccaccgg tctggacgca tggctgattc 650
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 tggttttgct ggtgtcctc tgctgtgcta tctctgtcct gtacatgtt 750
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 cagccccacg ggaaggagg ggtaccaggc cgtccttcag gaggggagg 850
 agcagaccg caactacgtg agcagcctga agcggcagat cgacagctc 900
 aaggaggagc tgcaggagag gaggtagcag cttaggaatg ggcagtacca 950
 agccagcat gctgtggcc tgggtctgga caggagcccc ccagagaaaa 1000
 cccaggccga cctctggcc ttctgcact cgcaggtgga caaggcagag 1050
 gtgaatgctg gcgtcaagct ggccacagag tatgcagcag tgcctttcga 1100

Sequence Listing - P3230R1C1.txt

tagctttact ctacagaagg tgtaccagct ggagactggc cttaccgcc 1150
accccgagga gaagcctgtg aggaaggaca agcgggatga gttggtgga 1200
gccattgaat cagccttga gaccctgaac aatcctgcag agaacagccc 1250
caatcacgt ccttacacgg cctctgattt catagaaggg atctaccgaa 1300
cagaaaggga caaagggaca ttgtatgagc tcacctcaa aggggaccac 1350
aaacacgaat tcaaacggct catcttattt cgaccattca gcccattcat 1400
gaaagtgaat aatgaaaagc tcaacatggc caacacgctt atcaatgtta 1450
tcgtgcctct agcaaaaagg gtggacaagt tccggcagtt catgcagaat 1500
ttcagggaga tgtgcattga gcaggatggg agagtccatc tactgttgt 1550
ttactttggg aaagaagaaa taaatgaagt caaaggaata ctgaaaaca 1600
cttcaaagc tgccaacttc aggaacttta cttcatcca gctgaatgga 1650
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tatccagttc tttcagtc gtacaatcct ggcataatat acggccacca 1850
tgatgcagtc cctcccttgg aacagcagct ggtcataaag aaggaaactg 1900
gattttggag agactttgga ttgggatga cgtgtcagta tcggtcagac 1950
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gacgagctga ccccgagca gtacaagatg tgcatgcagt ccaaggccat 2150
gaacgaggca tcccacggcc agctgggcat gctggtgttc aggcacgaga 2200
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tgaactcca gagaaggatt gtgggagaca cttttcttt cttttgcaa 2300
ttactgaaag tggctgcaac agagaaaaga cttcataaa ggacgacaaa 2350
agaattggac tgatgggtca gagatgagaa agcctccgat ttctctctgt 2400
tgggcttttt acaacagaaa taaaatctc cgctttgcct gcaaaagtaa 2450
cccagttgca ccctgtgaag tgtctgacaa aggcagaatg cttgtgagat 2500

Sequence Listing - P3230R1C1.txt

tataagccta atggtgtgga ggttttgatg gtgtttacaa tacactgaga 2550
cctgttgttt tgtgtgctca ttgaaatatt catgatttaa gagcagtttt 2600
gtaaaaaatt cattagcatg aaaggcaagc atatttctcc tcatatgaat 2650
gagcctatca gcagggctct agtttctagg aatgctaaaa tatcagaagg 2700
caggagagga gataggctta ttatgatact agtgagtaca ttaagtaaaa 2750
taaaatggac cagaaaagaa aagaaccat aaatatcgtg tcatattttc 2800
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ttatgagaac tttcagttca aagcatcaaa ttgatgccat atccaaggac 3050
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agtattttcg aagaggagca actgaacact ggaggaaaag aaaatgacac 3200
ttctgcttt acagaaaagg aaactcattc agactggtga tatcgtgatg 3250
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gagaaaaata tatatatata tatatatatt gtgaaagatc aatccatctg 3450
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accaagatgc ttctgaaaat tgcattttat taccatttca aactattttt 3600
taaaaataaa tacagttaac atagagtggg ttcttcattc atgtgaaaat 3650
tattagccag caccagatgc atgagctaata tatctctttg agtccttgct 3700
tctgtttgct cacagtaaac tcattgttta aaagcttcaa gaacattcaa 3750
gctgttggtg tgtaaaaaa tgcattgtat tgattgtac tggtagtta 3800
tgaaatttaa ttaaacaca ggccatgaat ggaagggtgg attgcacagc 3850

Sequence Listing - P3230R1C1.txt

taataaaata tgatttgagg atatgaa 3877

<210> 72

<211> 532

<212> PRT

<213> Homo Sapien

<400> 72

Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val
1 5 10 15

Val Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr
20 25 30

Met Leu Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu
35 40 45

Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
50 55 60

Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
65 70 75

Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
80 85 90

Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
95 100 105

Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
110 115 120

Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
125 130 135

Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser
140 145 150

Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg
155 160 165

His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu
170 175 180

Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala
185 190 195

Glu Asn Ser Pro Asn His Arg Pro Tyr Thr Ala Ser Asp Phe Ile
200 205 210

Glu Gly Ile Tyr Arg Thr Glu Arg Asp Lys Gly Thr Leu Tyr Glu
215 220 225

Leu Thr Phe Lys Gly Asp His Lys His Glu Phe Lys Arg Leu Ile
230 235 240

Sequence Listing - P3230R1C1.txt

Leu Phe Arg Pro Phe Ser Pro Ile Met Lys Val Lys Asn Glu Lys
 245 250 255
 Leu Asn Met Ala Asn Thr Leu Ile Asn Val Ile Val Pro Leu Ala
 260 265 270
 Lys Arg Val Asp Lys Phe Arg Gln Phe Met Gln Asn Phe Arg Glu
 275 280 285
 Met Cys Ile Glu Gln Asp Gly Arg Val His Leu Thr Val Val Tyr
 290 295 300
 Phe Gly Lys Glu Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn
 305 310 315
 Thr Ser Lys Ala Ala Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu
 320 325 330
 Asn Gly Glu Phe Ser Arg Gly Lys Gly Leu Asp Val Gly Ala Arg
 335 340 345
 Phe Trp Lys Gly Ser Asn Val Leu Leu Phe Phe Cys Asp Val Asp
 350 355 360
 Ile Tyr Phe Thr Ser Glu Phe Leu Asn Thr Cys Arg Leu Asn Thr
 365 370 375
 Gln Pro Gly Lys Lys Val Phe Tyr Pro Val Leu Phe Ser Gln Tyr
 380 385 390
 Asn Pro Gly Ile Ile Tyr Gly His His Asp Ala Val Pro Pro Leu
 395 400 405
 Glu Gln Gln Leu Val Ile Lys Lys Glu Thr Gly Phe Trp Arg Asp
 410 415 420
 Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp Phe Ile Asn
 425 430 435
 Ile Gly Gly Phe Asp Leu Asp Ile Lys Gly Trp Gly Gly Glu Asp
 440 445 450
 Val His Leu Tyr Arg Lys Tyr Leu His Ser Asn Leu Ile Val Val
 455 460 465
 Arg Thr Pro Val Arg Gly Leu Phe His Leu Trp His Glu Lys Arg
 470 475 480
 Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln
 485 490 495
 Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu
 500 505 510

Sequence Listing - P3230R1C1.txt

Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln
515 520 525

Lys Thr Ser Ser Lys Lys Thr
530

<210> 73

<211> 1701

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1528

<223> unknown base

<400> 73

gagactgcag agggagataa agagagaggg caaagaggca gcaagagatt 50

tgtctctgggg atccagaaac ccatgatacc ctactgaaca ccgaatcccc 100

tggaagccca cagagacaga gacagcaaga gaagcagaga taaatacact 150

cacgccagga gctcgtctgc tctctctctc tctctctcac tcctccctcc 200

ctctctctct gcctgtccta gtcctctagt cctcaaattc ccagtccct 250

gcaccccttc ctgggacact atgttgttct ccgccctcct gctggaggtg 300

atttgatcc tggctgcaga tgggggtcaa cactggacgt atgaggggccc 350

acatggctcag gaccattggc cagcctctta ccctgagtgt ggaaacaatg 400

cccagtcgcc catcgatatt cagacagaca gtgtgacatt tgaccctgat 450

ttgcctgctc tgcagcccca cggatatgac cagcctggca ccgagccttt 500

ggacctgcac aacaatggcc acacagtga actctctctg ccctctaccc 550

tgtatctggg tggacttccc cgaaaatatg tagctgcccc gctccacctg 600

cactgggggtc agaaaggatc cccagggggg tcagaacacc agatcaacag 650

tgaagccaca ttgcagagc tccacattgt acattatgac tctgattcct 700

atgacagctt gagtgaggct gctgagaggc ctgaggcct ggctgtcctg 750

ggcatcctaa ttgagggtggg tgagactaag aatatagctt atgaacacat 800

tctgagtcac ttgcatgaag tcaggcataa agatcagaag acctcagtgc 850

ctcccttcaa cctaagagag ctgctcccca aacagctggg gcagtacttc 900

cgctacaatg gctcgtctac aactccccct tgctaccaga gtgtgctctg 950

gacagttttt tatagaagggt cccagatttc aatggaacag ctggaaaagc 1000

Sequence Listing - P3230R1C1.txt

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 cagaactacc gagcccttca gcctctcaat cagcgcattg tctttgcttc 1100
 tttcatccaa gcaggatcct cgtataccac aggtgaaatg ctgagtctag 1150
 gtgtaggaat cttggttggc tgtctctgcc ttctctggc tgtttatttc 1200
 attgctagaa agattcggaa gaagaggctg gaaaaccgaa agagtgtggt 1250
 cttcacctca gcacaagcca cgactgaggc ataaattcct tctcagatac 1300
 catggatgtg gatgacttcc cttcatgcct atcaggaagc ctctaaaatg 1350
 ggggtgtagga tctggccaga aacactgtag gagtagtaag cagatgtcct 1400
 ccttcccctg gacatctctt agagaggaat ggaccaggc tgtcattcca 1450
 ggaagaactg cagagccttc agcctctcca aacatgtagg aggaaatgag 1500
 gaaatcgctg tgttgtaat gcagaganca aactctgttt agttgcaggg 1550
 gaagtttggg atatacccca aagtcctcta cccctcact tttatggccc 1600
 tttccctaga tatactgcgg gatctctct taggataaag agttgctgtt 1650
 gaagttgtat atttttgatc aatatatttg gaaattaaag tttctgactt 1700

t 1701

<210> 74

<211> 337

<212> PRT

<213> Homo Sapien

<400> 74

Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala

1 5 10 15

Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln

20 25 30

Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln

35 40 45

Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp

50 55 60

Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu

65 70 75

Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu

80 85 90

Sequence Listing - P3230R1C1.txt

```

Pro Ser Thr Leu Tyr Leu Gly Gly Leu Pro Arg Lys Tyr Val Ala
    95          100          105

Ala Gln Leu His Leu His Trp Gly Gln Lys Gly Ser Pro Gly Gly
    110          115          120

Ser Glu His Gln Ile Asn Ser Glu Ala Thr Phe Ala Glu Leu His
    125          130          135

Ile Val His Tyr Asp Ser Asp Ser Tyr Asp Ser Leu Ser Glu Ala
    140          145          150

Ala Glu Arg Pro Gln Gly Leu Ala Val Leu Gly Ile Leu Ile Glu
    155          160          165

Val Gly Glu Thr Lys Asn Ile Ala Tyr Glu His Ile Leu Ser His
    170          175          180

Leu His Glu Val Arg His Lys Asp Gln Lys Thr Ser Val Pro Pro
    185          190          195
Phe Asn Leu Arg Glu Leu Leu Pro Lys Gln Leu Gly Gln Tyr Phe
    200          205          210

Arg Tyr Asn Gly Ser Leu Thr Thr Pro Pro Cys Tyr Gln Ser Val
    215          220          225

Leu Trp Thr Val Phe Tyr Arg Arg Ser Gln Ile Ser Met Glu Gln
    230          235          240

Leu Glu Lys Leu Gln Gly Thr Leu Phe Ser Thr Glu Glu Glu Pro
    245          250          255

Ser Lys Leu Leu Val Gln Asn Tyr Arg Ala Leu Gln Pro Leu Asn
    260          265          270

Gln Arg Met Val Phe Ala Ser Phe Ile Gln Ala Gly Ser Ser Tyr
    275          280          285

Thr Thr Gly Glu Met Leu Ser Leu Gly Val Gly Ile Leu Val Gly
    290          295          300

Cys Leu Cys Leu Leu Leu Ala Val Tyr Phe Ile Ala Arg Lys Ile
    305          310          315

Arg Lys Lys Arg Leu Glu Asn Arg Lys Ser Val Val Phe Thr Ser
    320          325          330

Ala Gln Ala Thr Thr Glu Ala
    335

```

<210> 75
 <211> 1743
 <212> DNA
 <213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 75

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cttatccatc aacatgaaga atgtcctaca atggactcca ccagaggggtc 150
ttcaaggagt taaagttact tacactgtgc agtatttcat cacaaattgg 200
cccaccagag gtggcactga ctacagatga gaagtcatt tctgttgctc 250
tgacagctcc agagaagtgg aagagaaatc cagaagacct tctgtttcc 300
atgcaacaaa tatactcaa tctgaagtat aacgtgtctg tgttgaatac 350
taaataaac agaacgtggg ccagtggtg gaccaaccac acgctgggtc 400
tcacctggct ggagccgaac actctttact gcgtacacgt ggagtccttc 450
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gactttgaaa gatcaatcat cagagttcaa ggctaaaatc atcttctggt 550
atgttttgcc catatctatt accgtgtttc tttttctgt gatgggctat 600
tccatctacc gatatatcca cgttggaaca gagaaacacc cagcaaattt 650
gattttgatt tatggaaatg aatttgaaa aagattcttt gtgcctgctg 700
aaaaaatcgt gattaacttt atcacctca atatctcgga tgattctaaa 750
atttctcatc aggatatgag ttactggga aaaagcagtg atgtatccag 800
ccttaatgat cctcagcca gcgggaacct gagggcccct caggaggaag 850
aggaggtgaa acatttaggg tatgcttcgc atttgatgga aatttttgt 900
gactctgaag aaaacacgga aggtacttct ctcaccagc aagagtcctt 950
cagcagaaca atacccccgg ataaaacagt cattgaatat gaatatgatg 1000
tcagaaccac tgacatttgt gcggggcctg aagagcagga gctcagtttg 1050
caggaggagg tgtccacaca aggaacatta ttggagtcgc aggcagcgtt 1100
ggcagtcctg ggcccgcaaa cgttacagta ctatacacc cctcagctcc 1150
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gaggaagagc catcgacgac cctggtcgac tgggatcccc aaactggcag 1250
gctgtgtatt ccttcgtgt ccagcttca ccaggattca gagggctgcg 1300
agccttctga gggggatggg ctcggagagg agggcttct atctagactc 1350

Sequence Listing - P3230R1C1.txt

tatgaggagc cggctccaga caggccacca ggagaaaatg aaacatatct 1400
catgcaattc atggaggaat ggggggtata tgtgcagatg gaaaactgat 1450
gccaacactt ccttttgctt tttgtttcct gtgcaaaca gtgagtcacc 1500
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cgtgtgtgat tgggtcatgc atgtaggctt cttacaatg atgggtgggcc 1650
tctggagtcc aggggctggc cggttgttct atgcagagaa agcagtcaat 1700
aaatgtttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76

<211> 442

<212> PRT

<213> Homo Sapien

<400> 76

Met Ser Tyr Asn Gly Leu His Gln Arg Val Phe Lys Glu Leu Lys
1 5 10 15

Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu
20 25 30

Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr
35 40 45

Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
50 55 60

Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
65 70 75

Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
80 85 90

Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val
95 100 105

His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro
110 115 120

Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu
125 130 135

Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile
140 145 150

Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr
155 160 165

Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile Leu Ile

Sequence Listing - P3230R1C1.txt

170	175	180
Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys		
185	190	195
Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys		
200	205	210
Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val		
215	220	225
Ser Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Arg Pro Pro		
230	235	240
Gln Glu Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu		
245	250	255
Met Glu Ile Phe Cys Asp Ser Glu Glu Asn Thr Glu Gly Thr Ser		
260	265	270
Leu Thr Gln Gln Glu Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys		
275	280	285
Thr Val Ile Glu Tyr Glu Tyr Asp Val Arg Thr Thr Asp Ile Cys		
290	295	300
Ala Gly Pro Glu Glu Gln Glu Leu Ser Leu Gln Glu Glu Val Ser		
305	310	315
Thr Gln Gly Thr Leu Leu Glu Ser Gln Ala Ala Leu Ala Val Leu		
320	325	330
Gly Pro Gln Thr Leu Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp		
335	340	345
Leu Asp Pro Leu Ala Gln Glu His Thr Asp Ser Glu Glu Gly Pro		
350	355	360
Glu Glu Glu Pro Ser Thr Thr Leu Val Asp Trp Asp Pro Gln Thr		
365	370	375
Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser		
380	385	390
Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly		
395	400	405
Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro		
410	415	420
Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly		
425	430	435
Leu Tyr Val Gln Met Glu Asn		
440		

Sequence Listing - P3230R1C1.txt

<210> 77

<211> 1636

<212> DNA

<213> Homo Sapien

<400> 77

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gctgccctct gacacctggg aagatggccg gcccgtagac cttcacctt 100
ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150
tgcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200
agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250
agtgccatgc gggaaaagcc agccggaggc atcctgtgct tgggcagcct 300
ggtgaacacc gtctgaagc acatcatctg gctgaaggct atcacagcta 350
acatcctcca gctgcagggtg aagccctcgg ccaatgacca ggagctgcta 400
gtcaagatcc ccttgacat ggtggctgga ttcaacacgc ccttggtaa 450
gaccatcgtg gaggttccaca tgacgactga ggccaagcc accatccgca 500
tggacaccag tgcaagtggc cccaccgccc tggctctcag tgactgtgcc 550
accagccatg ggagcctgag catccaactg ctgtataagc tctccttct 600
ggtgaacgcc ttagctaagc aggtcatgaa cctcctagt ccatcctgc 650
ccaatctagt gaaaaaccag ctgtgtcccg tgatcgaggc ttccttcaat 700
ggcatgtatg cagacctctc gcagctgggtg aagggtgcca tttcctcag 750
cattgaccgt ctggagtgtg accttctgta tcctgccatc aagggtgaca 800
ccattcagct ctacctgggg gccaaagttgt tggactcaca gggaaagggtg 850
accaagtggg tcaataactc tgcagcttcc ctgacaatgc ccacctgga 900
caacatcccg ttcagcctca tcgtgagtca ggacgtgggtg aaagctgcag 950
tggctgctgt gctctctcca gaagaattca tggctctgtt ggactctgtg 1000
cttctgaga gtgcccacg gctgaagtca agcatcgggc tgatcaatga 1050
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aggacactcc cgagtttttt atagaccaag gccatgcaa ggtggcccaa 1150
ctgatcgtgc tggaaagtgt tcctccagt gaagccctcc gcccttgtt 1200
caccctgggc atcgaagcca gctcggaagc tcagttttac accaaagggtg 1250

Sequence Listing - P3230R1C1.txt

accaacttat actcaacttg aataacatca gctctgatcg gatccagctg 1300
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 cactgagatc atccactcca tcctgctgcc gaaccagaat ggcaaattaa 1400
 gatctggggg cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1450
 gagtcctcac tgaccaagga tgcccttgctg cttactccag cctccttgctg 1500
 gaaaccagc tctcctgtct cccagtgaag acttggatgg cagccatcag 1550
 ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600
 cctctctgca atcaataaac acttgctgtg gaaaaa 1636

<210> 78

<211> 484

<212> PRT

<213> Homo Sapien

<400> 78

Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala
 1 5 10 15

Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
 20 25 30

Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
 35 40 45

Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
 50 55 60

Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
 65 70 75

Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
 80 85 90

Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
 95 100 105

Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
 110 115 120

Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
 125 130 135

Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
 140 145 150

Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
 155 160 165

Sequence Listing - P3230R1C1.txt

Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180

Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195

Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly
200 205 210

Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu
215 220 225

Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys
230 235 240

Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser
245 250 255

Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu
260 265 270

Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser
275 280 285

Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu
290 295 300

Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His
305 310 315

Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp
320 325 330

Lys Leu Gly Ser Thr Gln Ile Val Lys Ile Leu Thr Gln Asp Thr
335 340 345

Pro Glu Phe Phe Ile Asp Gln Gly His Ala Lys Val Ala Gln Leu
350 355 360

Ile Val Leu Glu Val Phe Pro Ser Ser Glu Ala Leu Arg Pro Leu
365 370 375

Phe Thr Leu Gly Ile Glu Ala Ser Ser Glu Ala Gln Phe Tyr Thr
380 385 390

Lys Gly Asp Gln Leu Ile Leu Asn Leu Asn Asn Ile Ser Ser Asp
395 400 405

Arg Ile Gln Leu Met Asn Ser Gly Ile Gly Trp Phe Gln Pro Asp
410 415 420

Val Leu Lys Asn Ile Ile Thr Glu Ile Ile His Ser Ile Leu Leu
425 430 435

Sequence Listing - P3230R1C1.txt

Pro Asn Gln Asn Gly Lys Leu Arg Ser Gly Val Pro Val Ser Leu
 440 445 450

Val Lys Ala Leu Gly Phe Glu Ala Ala Glu Ser Ser Leu Thr Lys
 455 460 465

Asp Ala Leu Val Leu Thr Pro Ala Ser Leu Trp Lys Pro Ser Ser
 470 475 480

Pro Val Ser Gln

<210> 79

<211> 1475

<212> DNA

<213> Homo Sapien

<400> 79

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 gcttctactg agaggtctgc catggcctct ctggcctcc aactgtggg 150
 ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
 tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250
 gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
 catcacccag tgtgacatct atagcaccct tctgggcctg cccgctgaca 350
 tccaggctgc ccaggccatg atggtgacat ccagtgcaat ctctccctg 400
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 ctggaatcat cctctgcttt tctgtctcat ccagagaaa tcgctccaac 700
 tactacgatg cctaccaagc ccaacctctt gccacaagga gctctccaag 750
 gcctgggtcaa cctcccaaag tcaagagtga gttcaattcc tacagcctga 800
 cagggatagt gtgaagaacc aggggccaga gctgggggggt ggctgggtct 850
 gtgaaaaaca gtggacagca ccccaggggc cacaggtgag ggacactacc 900
 actggatcgt gtcagaaggt gctgctgagg atagactgac ttggccatt 950

Sequence Listing - P3230R1C1.txt

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 attgccaagg atgctcgcca tgccagcctt tctgttttcc tcaccttgct 1050
 gctcccctgc cctaagtccc caaccctcaa ctgaaaccc cattccctta 1100
 agccaggact cagaggatcc ctttgcctc tggtttacct gggactccat 1150
 ccccaaacc actaatcaca tccactgac tgaccctctg tgatcaaaga 1200
 ccctctctct ggctgagggt ggctcttagc tcattgctgg ggatgggaag 1250
 gagaagcagt ggcttttggt ggcattgctc taacctactt ctcaagcttc 1300
 cctcaaaga aactgattgg cctggaacc tccatccac tcttgttatg 1350
 actccacagt gtccagacta atttgatcat gaactgaaat aaaaccatcc 1400
 tacggtatcc agggaacaga aagcaggatg caggatggga ggacaggaag 1450
 gcagcctggg acatttaaaa aaata 1475

<210> 80

<211> 230

<212> PRT

<213> Homo Sapien

<400> 80

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu

1 5 10 15

Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp

20 25 30

Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly

35 40 45

Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly

50 55 60

Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala

65 70 75

Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile

80 85 90

Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr

95 100 105

Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala

110 115 120

Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro

125 130 135

Sequence Listing - P3230R1C1.txt

Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
140 145 150

Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
155 160 165

Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
170 175 180

Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
185 190 195

Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
215 220 225

Leu Thr Gly Tyr Val
230

<210> 81

<211> 1732

<212> DNA

<213> Homo Sapien

<400> 81

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cttagacctc ctttctgccc ctcttttctt gccaccgct gcttctggc 150

ccttctccga ccccgtcta gcagcagacc tctgggggtc tgtgggtga 200

tctgtggccc ctgtgcctcc gtgtcctttt cgtctccctt cctcccact 250

ccgctcccg accagcggcc tgacctggg gaaaggatgg ttcccaggt 300

gagggtcctc tctccttgc tgggactcgc gctgctctgg ttcccctgg 350

actccacgc tcgagccgc ccagacatgt tctgcctttt ccatgggaag 400

agatactccc ccggcgagag ctggcacccc tacttgagc cacaaggcct 450

gatgtactgc ctgcgtgta cctgctcaga gggcgcccat gtgagttgtt 500

accgcctcca ctgtccgcct gtccactgcc cccagcctgt gacggagcca 550

cagcaatgct gtccaagtg tgtggaacct cacactcct ctggactccg 600

ggccccacca aagtctgcc agcacaacgg gaccatgtac caacacggag 650

agatcttcag tgcccatgag ctgttccct cccgcctgcc caaccagtgt 700

gtcctctgca gctgcacaga gggccagatc tactgcggcc tcacaacctg 750

Sequence Listing - P3230R1C1.txt

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aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
cagtcgctcc atgggggtgag acatcctcag gatccatgtt ccagtgatgc 900
tgggagaaaag agaggccccg gcacccagc cccactggc ctcagcgccc 950
ctctgagctt catcctcgc cacttcagac ccaagggagc aggcagcaca 1000
actgtcaaga tcgtcctgaa ggagaaacat aagaaagcct gtgtgcatgg 1050
cggaagacg tactccacg gggaggtgtg gcaccggcc ttccgtgcct 1100
tcggcccctt gccctgcac ctatgcacct gtgaggatgg ccgccaggac 1150
tgccagcgtg tgacctgtcc caccgagtac cctgccgtc accccgagaa 1200
agtggctggg aagtgtgca agattgccc agaggacaaa gcagaccctg 1250
gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300
ctcgtccaca catcggtatc ccaagccca gacaacctgc gtcgctttgc 1350
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aagacttcca gaaagaggca cagcacttcc gactgctcgc tggccccac 1550
gaaggtcact ggaacgtctt ctagcccag accctggagc tgaaggtcac 1600
ggcagtcga gacaaagtga ccaagacata acaagacct aacagttgca 1650
gatatgagct gtataattgt tgttattata tattaataaa taagaagttg 1700
cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

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<210> 82

<211> 451

<212> PRT

<213> Homo Sapien

<400> 82

Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala

1 5 10 15

Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp

20 25 30

Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser

35 40 45

Sequence Listing - P3230R1C1.txt

Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg		
50	55	60
Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His		
65	70	75
Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln		
80	85	90
Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg		
95	100	105
Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His		
110	115	120
Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro		
125	130	135
Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys		
140	145	150
Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro		
155	160	165
Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu		
170	175	180
Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg		
185	190	195
His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly		
200	205	210
Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe		
215	220	225
Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val		
230	235	240
Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His Gly		
245	250	255
Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg		
260	265	270
Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly		
275	280	285
Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys		
290	295	300
Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro		
305	310	315
Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg		

Sequence Listing - P3230R1C1.txt

320	325	330
Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser		
335	340	345
Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala		
350	355	360
Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu		
365	370	375
Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His		
380	385	390
Ser Gln Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala		
395	400	405
Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro		
410	415	420
Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala		
425	430	435
Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys		
440	445	450

Thr

<210> 83

<211> 2052

<212> DNA

<213> Homo Sapien

<400> 83

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catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200

ttggttctga gtctctcaa gctgggatca gggcagtggc aggtgtttgg 250

gccagacaag cctgtccagg ccttggtggg ggaggacgca gcattctcct 300

gtttctgtc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350

agggggcagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400

gccatttatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450

attctattgc ggaggggacgc atctctctga ggctggaaaa cattactgtg 500

Sequence Listing - P3230R1C1.txt

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tttccatcac gggatatgtt gatagagaca tccagctact ctgtcagtcc 650
tcgggctggt tccccggcc cacagcgaag tggaaaggct cacaaggaca 700
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tgggaatact ctgctgtggc ctatttttg gcattgttg actgaagatt 950
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aaaactgtaa cccatagaaa agctcccag gaggtgcctc actctgagaa 1150
gagatttaca aggaagagtg tggtggttc tcagagttc caagcaggga 1200
aacattactg ggaggtggac ggaggacaca ataaaagggtg gcgcgtggga 1250
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cgatcatggg tactgggtcc tcagactgaa tggagaacat ttgtattca 1350
cattaaatcc ccgtttatc agcgtcttc ccaggacccc acctacaaa 1400
ataggggtct tcttgacta tgagtgtggg accatctct tctcaacat 1450
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tgaggcccta cattgagtat ccgtctata atgagcaaaa tggaactccc 1550
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caaccacgcc ctctctccc aggggtgaaa ttaggatga atcacatccc 1700
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cagcagccgg ccaaggtggc ttccagatga agggggactg gcctgtccac 1800
atgggagtc ggtgtcatgg ctgccctgag ctgggaggga agaaggctga 1850
cattacattt agttgtctc cactcatct ggctaagtga tcttgaaata 1900

Sequence Listing - P3230R1C1.txt

ccacctctca ggtgaagaac cgtcaggaat tcccatctca caggctgtgg 1950

tgtagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000

acagagtgta tcctaatggt ttgttcatta tattacactt tcagtaaaaa 2050

aa 2052

<210> 84

<211> 500

<212> PRT

<213> Homo Sapien

<400> 84

Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly
1 5 10 15

Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
20 25 30

Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
35 40 45

Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe
50 55 60

Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe
65 70 75

Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp
80 85 90

Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr
95 100 105

Val Leu Asp Ala Gly Leu Tyr Gly Cys Arg Ile Ser Ser Gln Ser
110 115 120

Tyr Tyr Gln Lys Ala Ile Trp Glu Leu Gln Val Ser Ala Leu Gly
125 130 135

Ser Val Pro Leu Ile Ser Ile Thr Gly Tyr Val Asp Arg Asp Ile
140 145 150

Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro Arg Pro Thr Ala
155 160 165

Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr Asp Ser Arg
170 175 180

Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile Ser Leu
185 190 195

Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg His
200 205 210

Sequence Listing - P3230R1C1.txt

Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp
215 220 225

Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val Leu
230 235 240

Gly Ile Leu Cys Cys Gly Leu Phe Phe Gly Ile Val Gly Leu Lys
245 250 255

Ile Phe Phe Ser Lys Phe Gln Trp Lys Ile Gln Ala Glu Leu Asp
260 265 270

Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys
275 280 285

His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys
290 295 300

Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro
305 310 315

Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val
320 325 330

Val Ala Ser Gln Ser Phe Gln Ala Gly Lys His Tyr Trp Glu Val
335 340 345

Asp Gly Gly His Asn Lys Arg Trp Arg Val Gly Val Cys Arg Asp
350 355 360

Asp Val Asp Arg Arg Lys Glu Tyr Val Thr Leu Ser Pro Asp His
365 370 375

Gly Tyr Trp Val Leu Arg Leu Asn Gly Glu His Leu Tyr Phe Thr
380 385 390

Leu Asn Pro Arg Phe Ile Ser Val Phe Pro Arg Thr Pro Pro Thr
395 400 405

Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly Thr Ile Ser Phe
410 415 420

Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu Thr Cys Arg
425 430 435

Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser Tyr Asn
440 445 450

Glu Gln Asn Gly Thr Pro Ile Val Ile Cys Pro Val Thr Gln Glu
455 460 465

Ser Glu Lys Glu Ala Ser Trp Gln Arg Ala Ser Ala Ile Pro Glu
470 475 480

Sequence Listing - P3230R1C1.txt

Thr Ser Asn Ser Glu Ser Ser Ser Gln Ala Thr Thr Pro Phe Leu
 485 490 495

Pro Arg Gly Glu Met
 500

<210> 85

<211> 1665

<212> DNA

<213> Homo Sapien

<400> 85

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 gtaaactgct gacgatgcag agttccgtga cgggtcagga aggcctgtgt 150
 gtccatgtgc cctgctcctt ctctacccc tcgcatggct ggatttacc 200
 tggcccagta gttcatggct actggttccg ggaaggggcc aatacagacc 250
 aggatgctcc agtggccaca aacaacccag ctcgggcagt gtgggaggag 300
 actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350
 cctgagcatc agagatgcca gaagaagtga tgcggggaga tacttcttc 400
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 gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500
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Sequence Listing - P3230R1C1.txt

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 cctgactgaa ccttgggcag aagacagtcc cccagaccag cctccccag 1300
 cttctgcccg ctctcagtg ggggaaggag agctccagta tgcattcctc 1350
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 caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450
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 tcaaacctga atccacactg tgcctccct tttattttt taactaaaag 1650
 acagacaaat tccta 1665

<210> 86

<211> 463

<212> PRT

<213> Homo Sapien

<400> 86

Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Ala
 1 5 10 15

Glu Gly Gln Thr Ser Lys Leu Leu Thr Met Gln Ser Ser Val Thr
 20 25 30

Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser Phe Ser Tyr
 35 40 45

Pro Ser His Gly Trp Ile Tyr Pro Gly Pro Val Val His Gly Tyr
 50 55 60

Trp Phe Arg Glu Gly Ala Asn Thr Asp Gln Asp Ala Pro Val Ala
 65 70 75

Thr Asn Asn Pro Ala Arg Ala Val Trp Glu Glu Thr Arg Asp Arg
 80 85 90

Phe His Leu Leu Gly Asp Pro His Thr Lys Asn Cys Thr Leu Ser
 95 100 105

Ile Arg Asp Ala Arg Arg Ser Asp Ala Gly Arg Tyr Phe Phe Arg
 110 115 120

Met Glu Lys Gly Ser Ile Lys Trp Asn Tyr Lys His His Arg Leu

Sequence Listing - P3230R1C1.txt

125	130	135
Ser Val Asn Val Thr Ala Leu Thr His Arg Pro Asn Ile Leu Ile		
140	145	150
Pro Gly Thr Leu Glu Ser Gly Cys Pro Gln Asn Leu Thr Cys Ser		
155	160	165
Val Pro Trp Ala Cys Glu Gln Gly Thr Pro Pro Met Ile Ser Trp		
170	175	180
Ile Gly Thr Ser Val Ser Pro Leu Asp Pro Ser Thr Thr Arg Ser		
185	190	195
Ser Val Leu Thr Leu Ile Pro Gln Pro Gln Asp His Gly Thr Ser		
200	205	210
Leu Thr Cys Gln Val Thr Phe Pro Gly Ala Ser Val Thr Thr Asn		
215	220	225
Lys Thr Val His Leu Asn Val Ser Tyr Pro Pro Gln Asn Leu Thr		
230	235	240
Met Thr Val Phe Gln Gly Asp Gly Thr Val Ser Thr Val Leu Gly		
245	250	255
Asn Gly Ser Ser Leu Ser Leu Pro Glu Gly Gln Ser Leu Arg Leu		
260	265	270
Val Cys Ala Val Asp Ala Val Asp Ser Asn Pro Pro Ala Arg Leu		
275	280	285
Ser Leu Ser Trp Arg Gly Leu Thr Leu Cys Pro Ser Gln Pro Ser		
290	295	300
Asn Pro Gly Val Leu Glu Leu Pro Trp Val His Leu Arg Asp Ala		
305	310	315
Ala Glu Phe Thr Cys Arg Ala Gln Asn Pro Leu Gly Ser Gln Gln		
320	325	330
Val Tyr Leu Asn Val Ser Leu Gln Ser Lys Ala Thr Ser Gly Val		
335	340	345
Thr Gln Gly Val Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe		
350	355	360
Leu Ser Phe Cys Val Ile Phe Val Val Val Arg Ser Cys Arg Lys		
365	370	375
Lys Ser Ala Arg Pro Ala Ala Gly Val Gly Asp Thr Gly Ile Glu		
380	385	390
Asp Ala Asn Ala Val Arg Gly Ser Ala Ser Gln Gly Pro Leu Thr		
395	400	405

Sequence Listing - P3230R1C1.txt

Glu Pro Trp Ala Glu Asp Ser Pro Pro Asp Gln Pro Pro Pro Ala
410 415 420

Ser Ala Arg Ser Ser Val Gly Glu Gly Glu Leu Gln Tyr Ala Ser
425 430 435

Leu Ser Phe Gln Met Val Lys Pro Trp Asp Ser Arg Gly Gln Glu
440 445 450

Ala Thr Asp Thr Glu Tyr Ser Glu Ile Lys Ile His Arg
455 460

<210> 87

<211> 1176

<212> DNA

<213> Homo Sapien

<400> 87

agaaagctgc actctgttga gctccagggc gcagtggagg gagggagtga 50
aggagctctc tgtaccaag gaaagtgcag ctgagactca gacaagatta 100
caatgaacca actcagcttc ctgctgtttc tcatagcgac caccagagga 150
tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250
gtgcatttga tggcctgtat ttctccgca ctgagaatgg tgttatctac 300
cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctgggtggc 350
cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400
gggccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
tgggccaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500
ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600
ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
gtttggcatc taccagaaat atccagtga atatggagaa ggaaagtgtt 700
ggactgacaa cggcccggtg atccctgtgg tctatgattt tggcgacgcc 750
cagaaaacag catcttatta ctaccctat ggccagcggg aattcactgc 800
gggatttggt cagttcaggg tatttaataa cgagagagca gccaacgcct 850
tgtgtgctgg aatgaggggt accggatgta aactgagca tctatgcatt 900

Sequence Listing - P3230R1C1.txt

ggtaggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950
 ttctggtttt gattggagtg gatatggaac tcatgttggt tacagcagca 1000
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctctcca accatgagat cccaaggatg 1100
 gagaacaact taccagtag ctagaatgtt aatggcagaa gagaaaacaa 1150
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88

<211> 313

<212> PRT

<213> Homo Sapien

<400> 88

Met	Asn	Gln	Leu	Ser	Phe	Leu	Leu	Phe	Leu	Ile	Ala	Thr	Thr	Arg
1			5			10			15					
Gly	Trp	Ser	Thr	Asp	Glu	Ala	Asn	Thr	Tyr	Phe	Lys	Glu	Trp	Thr
		20			25			30						
Cys	Ser	Ser	Ser	Pro	Ser	Leu	Pro	Arg	Ser	Cys	Lys	Glu	Ile	Lys
		35			40			45						
Asp	Glu	Cys	Pro	Ser	Ala	Phe	Asp	Gly	Leu	Tyr	Phe	Leu	Arg	Thr
		50			55			60						
Glu	Asn	Gly	Val	Ile	Tyr	Gln	Thr	Phe	Cys	Asp	Met	Thr	Ser	Gly
		65			70			75						
Gly	Gly	Gly	Trp	Thr	Leu	Val	Ala	Ser	Val	His	Glu	Asn	Asp	Met
		80			85			90						
Arg	Gly	Lys	Cys	Thr	Val	Gly	Asp	Arg	Trp	Ser	Ser	Gln	Gln	Gly
		95			100			105						
Ser	Lys	Ala	Asp	Tyr	Pro	Glu	Gly	Asp	Gly	Asn	Trp	Ala	Asn	Tyr
		110			115			120						
Asn	Thr	Phe	Gly	Ser	Ala	Glu	Ala	Ala	Thr	Ser	Asp	Asp	Tyr	Lys
		125			130			135						
Asn	Pro	Gly	Tyr	Tyr	Asp	Ile	Gln	Ala	Lys	Asp	Leu	Gly	Ile	Trp
		140			145			150						
His	Val	Pro	Asn	Lys	Ser	Pro	Met	Gln	His	Trp	Arg	Asn	Ser	Ser
		155			160			165						
Leu	Leu	Arg	Tyr	Arg	Thr	Asp	Thr	Gly	Phe	Leu	Gln	Thr	Leu	Gly
		170			175			180						
His	Asn	Leu	Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Gly

Sequence Listing - P3230R1C1.txt

185	190	195
Glu Gly Lys Cys Trp Thr Asp Asn Gly Pro Val Ile Pro Val Val		
200	205	210
Tyr Asp Phe Gly Asp Ala Gln Lys Thr Ala Ser Tyr Tyr Ser Pro		
215	220	225
Tyr Gly Gln Arg Glu Phe Thr Ala Gly Phe Val Gln Phe Arg Val		
230	235	240
Phe Asn Asn Glu Arg Ala Ala Asn Ala Leu Cys Ala Gly Met Arg		
245	250	255
Val Thr Gly Cys Asn Thr Glu His His Cys Ile Gly Gly Gly Gly		
260	265	270
Tyr Phe Pro Glu Ala Ser Pro Gln Gln Cys Gly Asp Phe Ser Gly		
275	280	285
Phe Asp Trp Ser Gly Tyr Gly Thr His Val Gly Tyr Ser Ser Ser		
290	295	300
Arg Glu Ile Thr Glu Ala Ala Val Leu Leu Phe Tyr Arg		
305	310	

<210> 89

<211> 759

<212> DNA

<213> Homo Sapien

<400> 89

ctagatttgt cggttgctgg gagacttca ggagtcgctg tctctgaact 50

tccagcctca gagaccgccg cccttgctcc cgagggccat gggccgggtc 100

tcagggttg tgccctctcg ctctctgacg ctctggcgc atctggtggt 150

cgctcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200

ctctcacgtt ccccccgag gtagtatgaca agcaggacat tcagctggtg 250

gccgcgtct ctgtaccct gggcctctt gcagtggagc tggccggtt 300

cctctcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350

gggctcactg tagtgcattc gtggccctgt ccttctcat attcgagcgt 400

tgggagtgc ctacgtattg gtacatttt gtctctgca gtgccttcc 450

agctgtcact gaaatggctt tattcgtcac cgtcttggg ctgaaaaaga 500

aaccctctg attacctca tgacgggaac ctaaggacga agcctacagg 550

ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcggtt 600

Sequence Listing - P3230R1C1.txt

ttcccctcgg aaactgcttc tgctggagga tatgtgttg aataattacg 650

tcttgagtct gggattatcc gcattgtatt tagtgctttg taataaaata 700

tgttttgtag taacattaag acttatatac agttttaggg gacaattaa 750

aaaaaaaa 759

<210> 90

<211> 140

<212> PRT

<213> Homo Sapien

<400> 90

Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu
1 5 10 15

Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
20 25 30

Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
35 40 45

Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
50 55 60

Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
65 70 75

Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
80 85 90

Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
95 100 105

Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
110 115 120

Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu
125 130 135

Lys Lys Lys Pro Phe
140

<210> 91

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 91

ctgggacccc gaaaagagaa ggggagagcg aggggacgag agcggaggag 50

gaagatgcaa ctgactcgct gctgcttcgt gttcctggtg cagggtagcc 100

Sequence Listing - P3230R1C1.txt

tctatctggt catctgtggc caggatgatg gtcctcccgg ctacagaggac 150
cctgagcgtg atgaccacga gggccagccc cggccccggg tgcctcggaa 200
gcggggccac atctcaccta agtcccggcc catggccaat tccactctcc 250
tagggctgct ggccccgcct ggggaggcct ggggcattct tgggcagccc 300
cccaaccgcc cgaaccacag cccccaccc tcagccaagg tgaagaaaat 350
ctttggctgg ggcgacttct actccaacat caagacggtg gccctgaacc 400
tgctcgtcac aggggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
cacttccaac acaatgccac aggccaggga aacatctcca tcagcctcgt 500
gccccccagt aaagctgtag agttccacca ggaacagcag atcttcacg 550
aagccaaggc ctcaaaaatc ttcaactgcc ggatggagtg ggagaaggta 600
gaacggggcc gccggacctc gctttgcacc cacgaccag ccaagatctg 650
ctcccagac cacgctcaga gctcagccac ctggagctgc tcccagccct 700
tcaaagtcgt ctgtgtctac atgccttct acagcacgga ctatcggtg 750
gtccagaagg tgtgccaga ttacaactac catagtata cccctacta 800
cccatctggg tgaccggggg caggccacag aggccaggcc agggctggaa 850
ggacaggcct gcccatgcag gagaccatct ggacaccggg cagggaaggg 900
gttgggcctc aggcaggag ggggggtggag acgaggagat gccaaagtgg 950
gccagggcca agtctcaagt ggcagagaaa ggggtccaag tgctggtccc 1000
aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagt 1050
ggctctctgt gcagcctcac agggctttgc cacggagcca cagagagatg 1100
ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc ccagatcaa 1150
gtcatgggag gaagctaagc ccttggttct tgccatcctg aggaaagata 1200
gcaacagggg gggggagatt tcacagtggt ggacagcctg tcaacttagg 1250
atggatggct gagagggtt ctaggagcc agtcagcagg gtggggtggg 1300
gccagaggag ctctccagcc ctgcctagt ggcgcctga gcccttgtc 1350
gtgtgctgag catggcatga ggctgaagt gcaaccctgg ggtctttgat 1400
gtcttgacag attgaccatc tgtctccagc caggccaccc ctttcaaaa 1450
ttccctcttc tgccagtact cccctgtac caccattgc tgatggcaca 1500

Sequence Listing - P3230R1C1.txt

cccatcctta agctaagaca ggacgattgt ggtcctccca cactaaggcc 1550
acagcccatc cgcgtgctgt gtgtccctct tccaccccaa cccctgctgg 1600
ctcctctggg agcatccatg tcccggagag gggtcctca acagttagcc 1650
tcacctgtca gaccgggggt ctcccgatc tggatggcgc cgcctctca 1700
gcagcgggca cgggtggggc ggggccgggc cgcagagcat gtgctggatc 1750
tgttctgtgt gtctgtctgt ggggtggggg aggggaggga agtcttgtga 1800
aaccgctgat tgctgacttt tgtgtgaaga atcgtgttct tggagcagga 1850
aataaagctt gccccggggc a 1871

<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met Gln Leu Thr Arg Cys Cys Phe Val Phe Leu Val Gln Gly Ser
1 5 10 15

Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
20 25 30

Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
35 40 45

Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
50 55 60

Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
65 70 75

Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
80 85 90

Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
95 100 105

Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
110 115 120

Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
125 130 135

His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
140 145 150

Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
155 160 165

Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu

Sequence Listing - P3230R1C1.txt

170	175	180
Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro		
185	190	195
Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp		
200	205	210
Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe		
215	220	225
Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr		
230	235	240
Asn Tyr His Ser Asp Thr Pro Tyr Tyr Pro Ser Gly		
245	250	

<210> 93
 <211> 902
 <212> DNA
 <213> Homo Sapien

<400> 93
 cggtggccat gactgcggcc gtgttcttcg gctgcgcctt cattgccttc 50
 gggcctgcgc tcgcccttta tgtcttcacc atcgccatcg agccgttgcg 100
 tatcatcttc ctcatcgccg gagctttctt ctggttggtg tctctactga 150
 ttcgtccct tgtttggttc atggcaagag tcattattga caacaagat 200
 ggaccaacac agaaatatct gctgatcttt ggagcgtttg tctctgtcta 250
 tatccaagaa atgttccgat ttgcatatta taaactctta aaaaaagcca 300
 gtgaagggtt gaagagtata aaccagggtg agacagcacc ctctatgcga 350
 ctgctggcct atgtttctgg ctggggcttt ggaatcatga gtggagtatt 400
 ttccttttg aataccctat ctgactcctt ggggccaggc acagtgggca 450
 ttcattggaga ttctctcaa ttcttcctt attcagcttt catgacgctg 500
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 tgagaagaaa aagtggggca tcctccttat cgttctcctg acccacctgc 600
 tgggtgcagc ccagaccttc ataagttctt attatggaat aaacctggcg 650
 tcagcattta taatcctggt gctcatgggc acctgggcat tcttagctgc 700
 gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750
 actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800

Sequence Listing - P3230R1C1.txt

tcccaaaccg cagactacat cttagagga agcacaactg tgccttttc 850

tgaaaatccc ttttctggt ggaattgaga aagaaataaa actatgcaga 900

ta 902

<210> 94

<211> 257

<212> PRT

<213> Homo Sapien

<400> 94

Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly

1 5 10 15

Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu

20 25 30

Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser

35 40 45

Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile

50 55 60

Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly

65 70 75

Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr

80 85 90

Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn

95 100 105

Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser

110 115 120

Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn

125 130 135

Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly

140 145 150

Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val

155 160 165

Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly

170 175 180

Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr

185 190 195

His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly

200 205 210

Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly Thr

Sequence Listing - P3230R1C1.txt

215 220 225

Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu
230 235 240

Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg
245 250 255

Ser Arg

<210> 95

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 95

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acattttgcc tcgtggaccc aaaggtagca atctgaaaca tgaggagtac 100

gattctactg tttgtcttc taggatcaac tcggtcatta ccacagctca 150

aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaca 200

ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250

accattaaca cagatgctca cactggggcc agatctgcat ctgttaaata 300

ctgctgcagg aatgacacct ggtaccaga cccaccatt gaccctggga 350

gggttgaatg tacaacagca actgcacca catgtgttac caattttgt 400

cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450

aaatcttcac gagcctcatc atccattcct tgttcccggg aggcacctg 500

cccaccagtc aggcagggggc taatccagat gtccaggatg gaagccttcc 550

agcaggagga gcagggtgaa atcctgccac ccagggaacc ccagcaggcc 600

gcctcccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650

gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaata 700

agcaaatgga attcagtaag ctgtttcaaa tttttcaac taagctgcct 750

cgaatttggt gatacatgtg aatctttatc attgattata ttatggaata 800

gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850

gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatcccaa 900

cttttaaaaa caataattca atggataaat ctgtctttga aatataacat 950

Sequence Listing - P3230R1C1.txt

tatgctgcct ggatgatatg catattaaaa catatttga aaactggaaa 1000

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050

aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96

<211> 209

<212> PRT

<213> Homo Sapien

<400> 96

Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg

1 5 10 15

Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys

20 25 30

Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn

35 40 45

Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu

50 55 60

Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met

65 70 75

Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn

80 85 90

Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr

95 100 105

Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro

110 115 120

Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly

125 130 135

Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp

140 145 150

Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln

155 160 165

Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp

170 175 180

Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His

185 190 195

Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln

200 205

<210> 97

Sequence Listing - P3230R1C1.txt

<211> 2848

<212> DNA

<213> Homo Sapien

<400> 97

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ttgggcgctg gagggcctgt cctgacatg gtcctgcct ggctgtggct 150
gctttgtgtc tccgtcccc aggctctccc caaggcccag cctgcagagc 200
tgtctgtgga agttccagaa aactatggtg gaaatttccc ttatacctg 250
accaagttgc cgctgccccg tgagggggct gaaggccaga tcgtgctgtc 300
aggggactca ggcaaggcaa ctgagggccc atttgctatg gatccagatt 350
ctggcttctt gctggtgacc agggccctgg accgagagga gcaggcagag 400
taccagctac aggtcaccct ggagatgcag gatggacatg tcttgtgggg 450
tccacagcct gtgcttgtgc acgtgaagga tgagaatgac caggtgcccc 500
atttcttca agccatctac agagctcggc tgagccgggg taccaggcct 550
ggcatccctt tccttcttct tgaggcttca gaccgggatg agccaggcac 600
agccaactcg gatcttcgat tccacatcct gagccaggct ccagcccagc 650
cttccccaga catgttccag ctggagcctc ggctgggggc tctggccctc 700
agccccaagg ggagcaccag ccttgaccac gccctggaga ggacctacca 750
gctgttggtg caggtcaagg acatgggtga ccaggcctca ggccaccagg 800
ccactgccac cgtggaagtc tccatcatag agagcacctg ggtgtcccta 850
gagcctatcc acctggcaga gaatctcaaa gtcctatacc cgcaccacat 900
ggcccaggta cactggagtg ggggtgatgt gcactatcac ctggagagcc 950
atccccggg accctttgaa gtgaatgcag agggaaacct ctacgtgacc 1000
agagagctgg acagagaagc ccaggctgag tacctgctcc aggtgcgggc 1050
tcagaattcc catggcgagg actatgcggc ccctctggag ctgcacgtgc 1100
tggtgatgga tgagaatgac aacgtgccta tctgccctcc ccgtgacccc 1150
acagtcagca tcctgagct cagtccacca ggtactgaag tgactagact 1200
gtcagcagag gatgcagatg cccccggctc cccaattcc cacgttgtgt 1250

Sequence Listing - P3230R1C1.txt

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cagggtggacc ccacttcagg cagtgtgacg ctgggggtgc tccactccg 1350
agcaggccag aacatcctgc ttctggtgct ggccatggac ctggcaggcg 1400
cagaggggtgg cttcagcagc acgtgtgaag tcgaagtcgc agtcacagat 1450
atcaatgatc acgcccctga gttcatcact tccagattg ggcctataag 1500
cctccctgag gatgtggagc ccgggactct ggtggccatg ctaacagcca 1550
ttgatgctga cctcagagcc gccttccgcc tcatggattt tgccattgag 1600
aggggagaca cagaaggagc ttttggcctg gattgggagc cagactctgg 1650
gcatgttaga ctgagactct gcaagaacct cagttatgag gcagctcaa 1700
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gatgccaccc cccaagttgg accaggagag ctacgaggcc agtgtcccca 1850
tcagtcccc agccggtctt ttctgctga ccatccagcc ctccgacccc 1900
atcagccgaa cctcaggtt ctcctagtc aatgactcag agggctggct 1950
ctgcattgag aaattctccg gggaggtgca caccgcccag tccctgcagg 2000
gcgcccagcc tggggacacc tacacggtgc ttgtggaggc ccaggataca 2050
gccctgactc ttgccctgt gccctccaa tacctctgca cccccgcca 2100
agaccatggc ttgatcgtga gtggaccag caaggacccc gatctggcca 2150
gtgggcacgg tcctacagc ttacccttg gtccaaccc cacggtgcaa 2200
cgggattggc gcctccagac tctcaatggt tccatgcct acctcacctt 2250
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gccacaatgc ccagatgtgg cagctcctgg ttcgagtgat cgtgtgtcgc 2350
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gcccacgaag ctgtcggcag tgggcatcct ttagggcacc ctggtagcaa 2450
taggaatctt cctatcctc attttaccc actggaccat gtcaaggaag 2500
aaggacccgg atcaaccagc agacagcgtg cccctgaagg cgactgtctg 2550
aatggcccag gcagctctag ctgggagctt ggcctctggc tccatctgag 2600
tcccctggga gagagcccag cacccaagat ccagcagggg acaggacaga 2650

Sequence Listing - P3230R1C1.txt

gtagaagccc ctccatctgc cctgggggtgg aggcaccatc accatcacca 2700

ggcatgtctg cagagcctgg acaccaactt tatggactgc ccatgggagt 2750

gctccaaatg tcagggtgtt tgcccaataa taaagcccca gagaactggg 2800

ctgggccccta tgggaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 2848

<210> 98

<211> 807

<212> PRT

<213> Homo Sapien

<400> 98

Met Val Pro Ala Trp Leu Trp Leu Leu Cys Val Ser Val Pro Gln
1 5 10 15

Ala Leu Pro Lys Ala Gln Pro Ala Glu Leu Ser Val Glu Val Pro
20 25 30

Glu Asn Tyr Gly Gly Asn Phe Pro Leu Tyr Leu Thr Lys Leu Pro
35 40 45

Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
50 55 60

Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
65 70 75

Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala
80 85 90

Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val
95 100 105

Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn
110 115 120

Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu
125 130 135

Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala
140 145 150

Ser Asp Arg Asp Glu Pro Gly Thr Ala Asn Ser Asp Leu Arg Phe
155 160 165

His Ile Leu Ser Gln Ala Pro Ala Gln Pro Ser Pro Asp Met Phe
170 175 180

Gln Leu Glu Pro Arg Leu Gly Ala Leu Ala Leu Ser Pro Lys Gly
185 190 195

Ser Thr Ser Leu Asp His Ala Leu Glu Arg Thr Tyr Gln Leu Leu

Sequence Listing - P3230R1C1.txt

200	205	210
Val Gln Val Lys Asp Met Gly Asp Gln Ala Ser Gly His Gln Ala		
215	220	225
Thr Ala Thr Val Glu Val Ser Ile Ile Glu Ser Thr Trp Val Ser		
230	235	240
Leu Glu Pro Ile His Leu Ala Glu Asn Leu Lys Val Leu Tyr Pro		
245	250	255
His His Met Ala Gln Val His Trp Ser Gly Gly Asp Val His Tyr		
260	265	270
His Leu Glu Ser His Pro Pro Gly Pro Phe Glu Val Asn Ala Glu		
275	280	285
Gly Asn Leu Tyr Val Thr Arg Glu Leu Asp Arg Glu Ala Gln Ala		
290	295	300
Glu Tyr Leu Leu Gln Val Arg Ala Gln Asn Ser His Gly Glu Asp		
305	310	315
Tyr Ala Ala Pro Leu Glu Leu His Val Leu Val Met Asp Glu Asn		
320	325	330
Asp Asn Val Pro Ile Cys Pro Pro Arg Asp Pro Thr Val Ser Ile		
335	340	345
Pro Glu Leu Ser Pro Pro Gly Thr Glu Val Thr Arg Leu Ser Ala		
350	355	360
Glu Asp Ala Asp Ala Pro Gly Ser Pro Asn Ser His Val Val Tyr		
365	370	375
Gln Leu Leu Ser Pro Glu Pro Glu Asp Gly Val Glu Gly Arg Ala		
380	385	390
Phe Gln Val Asp Pro Thr Ser Gly Ser Val Thr Leu Gly Val Leu		
395	400	405
Pro Leu Arg Ala Gly Gln Asn Ile Leu Leu Leu Val Leu Ala Met		
410	415	420
Asp Leu Ala Gly Ala Glu Gly Gly Phe Ser Ser Thr Cys Glu Val		
425	430	435
Glu Val Ala Val Thr Asp Ile Asn Asp His Ala Pro Glu Phe Ile		
440	445	450
Thr Ser Gln Ile Gly Pro Ile Ser Leu Pro Glu Asp Val Glu Pro		
455	460	465
Gly Thr Leu Val Ala Met Leu Thr Ala Ile Asp Ala Asp Leu Glu		
470	475	480

Sequence Listing - P3230R1C1.txt

Pro Ala Phe Arg Leu Met Asp Phe Ala Ile Glu Arg Gly Asp Thr
485 490 495

Glu Gly Thr Phe Gly Leu Asp Trp Glu Pro Asp Ser Gly His Val
500 505 510

Arg Leu Arg Leu Cys Lys Asn Leu Ser Tyr Glu Ala Ala Pro Ser
515 520 525

His Glu Val Val Val Val Val Gln Ser Val Ala Lys Leu Val Gly
530 535 540

Pro Gly Pro Gly Pro Gly Ala Thr Ala Thr Val Thr Val Leu Val
545 550 555

Glu Arg Val Met Pro Pro Pro Lys Leu Asp Gln Glu Ser Tyr Glu
560 565 570

Ala Ser Val Pro Ile Ser Ala Pro Ala Gly Ser Phe Leu Leu Thr
575 580 585

Ile Gln Pro Ser Asp Pro Ile Ser Arg Thr Leu Arg Phe Ser Leu
590 595 600

Val Asn Asp Ser Glu Gly Trp Leu Cys Ile Glu Lys Phe Ser Gly
605 610 615

Glu Val His Thr Ala Gln Ser Leu Gln Gly Ala Gln Pro Gly Asp
620 625 630

Thr Tyr Thr Val Leu Val Glu Ala Gln Asp Thr Ala Leu Thr Leu
635 640 645

Ala Pro Val Pro Ser Gln Tyr Leu Cys Thr Pro Arg Gln Asp His
650 655 660

Gly Leu Ile Val Ser Gly Pro Ser Lys Asp Pro Asp Leu Ala Ser
665 670 675

Gly His Gly Pro Tyr Ser Phe Thr Leu Gly Pro Asn Pro Thr Val
680 685 690

Gln Arg Asp Trp Arg Leu Gln Thr Leu Asn Gly Ser His Ala Tyr
695 700 705

Leu Thr Leu Ala Leu His Trp Val Glu Pro Arg Glu His Ile Ile
710 715 720

Pro Val Val Val Ser His Asn Ala Gln Met Trp Gln Leu Leu Val
725 730 735

Arg Val Ile Val Cys Arg Cys Asn Val Glu Gly Gln Cys Met Arg
740 745 750

Sequence Listing - P3230R1C1.txt

Lys Val Gly Arg Met Lys Gly Met Pro Thr Lys Leu Ser Ala Val
755 760 765

Gly Ile Leu Val Gly Thr Leu Val Ala Ile Gly Ile Phe Leu Ile
770 775 780

Leu Ile Phe Thr His Trp Thr Met Ser Arg Lys Lys Asp Pro Asp
785 790 795

Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val
800 805

<210> 99

<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

ggctgaccgt gctacattgc ctggaggaag cctaaggaac ccaggcatcc 50

agctgcccac gcctgagtcc aagattcttc ccaggaacac aaacgtagga 100

gaccacgct cctggaagca ccagccttta tctcttcacc ttcaagtccc 150

ctttctcaag aatcctctgt tctttgccct ctaaagtctt ggtacatcta 200

ggaccaggc atcttgcttt ccagccacaa agagacagat gaagatgcag 250

aaaggaaatg ttctccttat gtttgggtcta ctattgcatt tagaagctgc 300

aacaaattcc aatgagacta gcacctctgc caacactgga tccagtgtga 350

tctccagtgg agccagcaca gccaccaact ctgggtccag tgtgacctcc 400

agtgggggtca gcacagccac catctcaggg tccagcgtga cctccaatgg 450

ggtcagcata gtcaccaact ctgagttcca tacaacctcc agtgggatca 500

gcacagccac caactctgag ttcagcacag cgtccagtgg gatcagcata 550

gccaccaact ctgagtccag cacaacctcc agtggggcca gcacagccac 600

caactctgag tccagcacac cctccagtgg ggccagcaca gtcaccaact 650

ctgggtccag tgtgacctcc agtggagcca gcactgccac caactctgag 700

tccagcacag tgtccagttag ggccagcact gccaccaact ctgagtctag 750

cacctctcc agtggggcca gcacagccac caactctgac tccagcaca 800

cctccagtgg ggctagcaca gccaccaact ctgagtccag cacaacctcc 850

agtggggcca gcacagccac caactctgag tccagcacag tgtccagttag 900

ggccagcact gccaccaact ctgagtccag cacaacctcc agtggggcca 950

Sequence Listing - P3230R1C1.txt

gcacagccac caactctgag tccagaacga cctccaatgg ggctggcaca 1000
gccaccaact ctgagtccag cacgacctcc agtggggcca gcacagccac 1050
caactctgac tccagcacag tgtccagtgg ggccagcact gccaccaact 1100
ctgagtccag cacgacctcc agtggggcca gcacagccac caactctgag 1150
tccagcacga cctccagtgg ggctagcaca gccaccaact ctgactccag 1200
cacaacctcc agtggggccg gcacagccac caactctgag tccagcacag 1250
tgtccagtgg gatcagcaca gtcaccaatt ctgagtccag cacacctcc 1300
agtggggcca acacagccac caactctgag tccagtacga cctccagtgg 1350
ggccaacaca gccaccaact ctgagtccag cacagtgtcc agtggggcca 1400
gcactgccac caactctgag tccagcaca cctccagtgg ggtagcaca 1450
gccaccaact ctgagtccag cacaacctcc agtggggcta gcacagccac 1500
caactctgac tccagcaca cctccagtga ggccagcaca gccaccaact 1550
ctgagtctag cacagtgtcc agtgggatca gcacagtcac caattctgag 1600
tccagcaca cctccagtgg ggccaacaca gccaccaact ctgggtccag 1650
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cttcccatag tgcattact gcagttagtg aggcaaagcc tgggtgggtcc 1750
ctgggtgccg gggaaatctt cctcatcacc ctggtctcgg ttgtggcggc 1800
cgtggggctc tttgctgggc tcttctctg tgtgagaaac agcctgtccc 1850
tgagaaacac cttaacaca gctgtctacc accctcatgg cctcaaccat 1900
ggccttggtc caggccctgg agggaaatcat ggagcccccc acaggcccag 1950
gtggagtcct aactggttct ggaggagacc agtatcatcg atagccatgg 2000
agatgagcgg gaggaacagc gggccctgag cagccccgga agcaagtgcc 2050
gcattcttca ggaaggaaga gacctgggca cccaagacct ggttctctt 2100
cattcatccc aggagacccc tccagcttt gtttgagatc ctgaaaatct 2150
tgaagaaggt attctcacc tttctgcct ttaccagaca ctggaaagag 2200
aatactatat tgctattta gctaagaaat aaatacatct catctaacac 2250
acacgacaaa gagaagctgt gcttgccccg ggggtgggtat ctgctctga 2300

Sequence Listing - P3230R1C1.txt

gatgaactca gttataggag aaaacctcca tgctggactc catctggcat 2350

tcaaaatctc cacagtaaaa tcaaagacc tcaaaaaaaaa aaaaaaaaaa 2400

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2436

<210> 100

<211> 596

<212> PRT

<213> Homo Sapien

<400> 100

Met Lys Met Gln Lys Gly Asn Val Leu Leu Met Phe Gly Leu Leu

1 5 10 15

Leu His Leu Glu Ala Ala Thr Asn Ser Asn Glu Thr Ser Thr Ser

20 25 30

Ala Asn Thr Gly Ser Ser Val Ile Ser Ser Gly Ala Ser Thr Ala

35 40 45

Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Val Ser Thr Ala

50 55 60

Thr Ile Ser Gly Ser Ser Val Thr Ser Asn Gly Val Ser Ile Val

65 70 75

Thr Asn Ser Glu Phe His Thr Thr Ser Ser Gly Ile Ser Thr Ala

80 85 90

Thr Asn Ser Glu Phe Ser Thr Ala Ser Ser Gly Ile Ser Ile Ala

95 100 105

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

110 115 120

Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Ser Thr Val

125 130 135

Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Ala Ser Thr Ala

140 145 150

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala

155 160 165

Thr Asn Ser Glu Ser Ser Thr Leu Ser Ser Gly Ala Ser Thr Ala

170 175 180

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

185 190 195

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

200 205 210

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala

215 220 225

Sequence Listing - P3230R1C1.txt

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
 230 235 240
 Thr Asn Ser Glu Ser Arg Thr Thr Ser Asn Gly Ala Gly Thr Ala
 245 250 255
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
 260 265 270
 Thr Asn Ser Asp Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala
 275 280 285
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
 290 295 300
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
 305 310 315
 Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Gly Thr Ala
 320 325 330
 Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val
 335 340 345
 Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Asn Thr Ala
 350 355 360
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala
 365 370 375
 Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala
 380 385 390
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Val Ser Thr Ala
 395 400 405
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
 410 415 420
 Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Glu Ala Ser Thr Ala
 425 430 435
 Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val
 440 445 450
 Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala
 455 460 465
 Thr Asn Ser Gly Ser Ser Val Thr Ser Ala Gly Ser Gly Thr Ala
 470 475 480
 Ala Leu Thr Gly Met His Thr Thr Ser His Ser Ala Ser Thr Ala
 485 490 495

Sequence Listing - P3230R1C1.txt

Val Ser Glu Ala Lys Pro Gly Gly Ser Leu Val Pro Trp Glu Ile
500 505 510

Phe Leu Ile Thr Leu Val Ser Val Val Ala Ala Val Gly Leu Phe
515 520 525

Ala Gly Leu Phe Phe Cys Val Arg Asn Ser Leu Ser Leu Arg Asn
530 535 540

Thr Phe Asn Thr Ala Val Tyr His Pro His Gly Leu Asn His Gly
545 550 555

Leu Gly Pro Gly Pro Gly Gly Asn His Gly Ala Pro His Arg Pro
560 565 570

Arg Trp Ser Pro Asn Trp Phe Trp Arg Arg Pro Val Ser Ser Ile
575 580 585

Ala Met Glu Met Ser Gly Arg Asn Ser Gly Pro
590 595

<210> 101
<211> 1728
<212> DNA
<213> Homo Sapien

<400> 101
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aggttgtagc ccctacggag cccagcttg cccacgcacc cactcggcg 100
tcgcgcggcg tgcctgctt gtcacaggtg ggaggctgga actatcaggc 150
tgaaaaacag agtgggtact ctcttctggg aagctggcaa caaatggatg 200
atgtgatata tgattccag gggaagggaa attgtggtgc ttctgaacc 250
atggtcaatt aacgaggcag ttctagcta ctgcacgtac ttcataaagc 300
aggactctaa aagctttgga atcatggtgt catggaaagg gatttacttt 350
atactgactc tgttttgggg aagctttttt ggaagcattt tcatgctgag 400
tcccttttta ctttgatgt ttgtaaacc atcttggtat cgctggatca 450
acaaccgcct tgtggcaaca tggctaccc tacctgtggc attattggag 500
accatgtttg gtgtaaaagt gattataact ggggatgcat ttgttctgg 550
agaaagaagt gtcattatca tgaaccatg gacaagaatg gactggatgt 600
tcctgtggaa ttgcctgatg cgatatagct acctcagatt ggagaaaatt 650
tgctcaaag cgagtctcaa aggtgttctt ggatttggtt gggccatgca 700
ggctgctgcc tatatcttca ttcataggaa atggaaggat gacaagagcc 750

Sequence Listing - P3230R1C1.txt

atttgaaga catgattgat tacttttctg atattcacga accacttcaa 800
 ctctcatat tcccagaagg gactgatctc acagaaaaca gcaagtctcg 850
 aagtaatgca ttgtctgaaa aaaatggact tcagaaatat gaatatgttt 900
 tacatccaag aactacaggc ttacttttg tggtagaccg tctaagagaa 950
 ggtaagaacc ttgatgctgt ccatgatatc actgtggcgt atcctcaca 1000
 cattcctcaa tcagagaagc acctctcca aggagacttt cccagggaaa 1050
 tccactttca cgtccaccgg tatccaatag acaccctccc cacatccaag 1100
 gaggaccttc aactctggtg ccacaaacgg tgggaagaga aagaagagag 1150
 gctgcgttcc ttctatcaag gggagaagaa tttttattt accggacaga 1200
 gtgtcattcc accttgcaag tctgaactca gggctcttgt ggtcaaattg 1250
 ctctctatac tgtattggac cctgttcagc cctgcaatgt gcctactcat 1300
 atattgttac agtcttgta agtgggtatt tataatcacc attgtaatct 1350
 ttgtgctgca agagagaata ttggtggac tggagatcat agaacttgca 1400
 tgttaccgac tttacacaa acagccacat ttaaattcaa agaaaaatga 1450
 gtaagattat aagggttgcc atgtgaaaac ctagagcata ttttggaat 1500
 gttctaaacc tttctaagct cagatgcatt ttgcatgac tatgtcgaat 1550
 atttcttact gccatcatta ttgttaaag atattttgca cttattttg 1600
 tgggaaaaat attgctacaa ttttttta tctctgaatg taatttcgat 1650
 actgtgtaca tagcaggagg tgatcggggg gaaataactt gggccagaat 1700
 attattaaac aatcatcagg cttttaaa 1728

<210> 102

<211> 414

<212> PRT

<213> Homo Sapien

<400> 102

Met His Ser Arg Gly Arg Glu Ile Val Val Leu Leu Asn Pro Trp
 1 5 10 15

Ser Ile Asn Glu Ala Val Ser Ser Tyr Cys Thr Tyr Phe Ile Lys
 20 25 30

Gln Asp Ser Lys Ser Phe Gly Ile Met Val Ser Trp Lys Gly Ile
 35 40 45

Sequence Listing - P3230R1C1.txt

Tyr Phe Ile Leu Thr Leu Phe Trp Gly Ser Phe Phe Gly Ser Ile
50 55 60

Phe Met Leu Ser Pro Phe Leu Pro Leu Met Phe Val Asn Pro Ser
65 70 75

Trp Tyr Arg Trp Ile Asn Asn Arg Leu Val Ala Thr Trp Leu Thr
80 85 90

Leu Pro Val Ala Leu Leu Glu Thr Met Phe Gly Val Lys Val Ile
95 100 105

Ile Thr Gly Asp Ala Phe Val Pro Gly Glu Arg Ser Val Ile Ile
110 115 120

Met Asn His Arg Thr Arg Met Asp Trp Met Phe Leu Trp Asn Cys
125 130 135

Leu Met Arg Tyr Ser Tyr Leu Arg Leu Glu Lys Ile Cys Leu Lys
140 145 150

Ala Ser Leu Lys Gly Val Pro Gly Phe Gly Trp Ala Met Gln Ala
155 160 165

Ala Ala Tyr Ile Phe Ile His Arg Lys Trp Lys Asp Asp Lys Ser
170 175 180

His Phe Glu Asp Met Ile Asp Tyr Phe Cys Asp Ile His Glu Pro
185 190 195

Leu Gln Leu Leu Ile Phe Pro Glu Gly Thr Asp Leu Thr Glu Asn
200 205 210

Ser Lys Ser Arg Ser Asn Ala Phe Ala Glu Lys Asn Gly Leu Gln
215 220 225

Lys Tyr Glu Tyr Val Leu His Pro Arg Thr Thr Gly Phe Thr Phe
230 235 240

Val Val Asp Arg Leu Arg Glu Gly Lys Asn Leu Asp Ala Val His
245 250 255

Asp Ile Thr Val Ala Tyr Pro His Asn Ile Pro Gln Ser Glu Lys
260 265 270

His Leu Leu Gln Gly Asp Phe Pro Arg Glu Ile His Phe His Val
275 280 285

His Arg Tyr Pro Ile Asp Thr Leu Pro Thr Ser Lys Glu Asp Leu
290 295 300

Gln Leu Trp Cys His Lys Arg Trp Glu Glu Lys Glu Glu Arg Leu
305 310 315

Sequence Listing - P3230R1C1.txt

Arg Ser Phe Tyr Gln Gly Glu Lys Asn Phe Tyr Phe Thr Gly Gln
320 325 330

Ser Val Ile Pro Pro Cys Lys Ser Glu Leu Arg Val Leu Val Val
335 340 345

Lys Leu Leu Ser Ile Leu Tyr Trp Thr Leu Phe Ser Pro Ala Met
350 355 360

Cys Leu Leu Ile Tyr Leu Tyr Ser Leu Val Lys Trp Tyr Phe Ile
365 370 375

Ile Thr Ile Val Ile Phe Val Leu Gln Glu Arg Ile Phe Gly Gly
380 385 390

Leu Glu Ile Ile Glu Leu Ala Cys Tyr Arg Leu Leu His Lys Gln
395 400 405

Pro His Leu Asn Ser Lys Lys Asn Glu
410

<210> 103

<211> 2403

<212> DNA

<213> Homo Sapien

<400> 103

cggctcgagc ggctcgagtg aagagcctct ccacggctcc tgcgcctgag 50

acagctggcc tgacctcaa atcatcatc caccctgct gtcactgtt 100

ttcatagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150

tttggtctc agtttctacg agctggtgac aggacagtgg caagtcactg 200

gaccgggcaa gtttgtccag gccttggtgg gggaggacgc cgtgttctcc 250

tgctccctct ttctgagac cagtgcagag gctatggaag tgcggttctt 300

caggaatcag ttcatgctg tggccacct ctacagagat ggggaagact 350

gggaatctaa gcagatgcca cagtatcgag ggagaactga gtttgtgaag 400

gactccattg caggggggag tgtctctcta aggctaaaaa acatcactcc 450

ctcggacatc ggctgtatg ggtgctggtt cagttcccag attacgatg 500

aggaggccac ctgggagctg cgggtggcag cactgggctc acttctctc 550

atttccatcg tgggatagt tgacggaggt atccagttac tctgcctgtc 600

ctcaggctgg tccccagc ccacagccaa gtggaaaggc ccacaaggac 650

aggatttgtc ttcagactcc agagcaaagc cagatgggta cagcctgtat 700

Sequence Listing - P3230R1C1.txt

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taggagagac gttttccag ccctcacctt ggcgcctggc ttctatttta 850
ctcgggttac tctgtggtgc cctgtgtggt gttgtcatgg ggatgataat 900
tggtttcttc aaatccaaag ggaaaatcca ggcggaactg gactggagaa 950
gaaagcacgg acaggcagaa ttgagagacg cccggaaaca cgagtgagag 1000
gtgactctgg atccagagac ggctcacccg aagctctgcg tttctgatct 1050
gaaaactgta acccatagaa aagctcccca ggaggtgcct cactctgaga 1100
agagatttac aaggaagagt gtggtggctt ctcagggttt ccaagcaggg 1150
agacattact gggaggtgga cgtgggacaa aatgtagggg ggtatgtggg 1200
agtgtgtcgg gatgacgtag acagggggaa gaacaatgtg actttgtctc 1250
ccaacaatgg gtattgggtc ctcagactga caacagaaca tttgtatttc 1300
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tcccatattc atatgtccag tgtctgggg atgagacaga gaagaccctg 1550
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ccgacaggtg gccccagctt cctctccgga gcctgcgcac agagagtcac 1650
gccccccact ctcttttagg gagctgaggt tcttctgccc tgagccctgc 1700
agcagcggca gtcacagctt ccagatgagg ggggattggc ctgaccctgt 1750
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ttaggtttag tttgtgaaaa ctccatccag ctaagcgatc ttgaacaagt 1850
cacaacctcc caggctctc atttgctagt cacggacagt gattcctgcc 1900
tcacaggtga agattaaaga gacaacgaat gtgaatcatg cttgcagggt 1950
tgagggcaca gtgttgcta atgatgtgtt tttatattat acattttccc 2000
accataaact ctgtttgctt attccacatt aatttacttt tctctatacc 2050
aaatcaccca tggaatagtt attgaacacc tgctttgtga ggctcaaaga 2100

Sequence Listing - P3230R1C1.txt

ataaagagga ggtaggattt ttactgatt ctataagccc agcattacct 2150
gatacaaaaa ccaggcaaag aaaacagaag aagaggaagg aaaactacag 2200
gtccatatcc ctcattaaca cagacacaaa aattctaaat aaaattttaa 2250
caaattaaac taaacaatat atttaaagat gatataaac tactcagtgt 2300
ggtttgcccc acaaatgcag agttgggtta atatttaa atcaaccagt 2350
gtaattcagc acattaataa agtaaaaaag aaaaccataa aaaaaaaaaa 2400
aaa 2403

<210> 104

<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

Met Ala Phe Val Leu Ile Leu Val Leu Ser Phe Tyr Glu Leu Val
1 5 10 15

Ser Gly Gln Trp Gln Val Thr Gly Pro Gly Lys Phe Val Gln Ala
20 25 30

Leu Val Gly Glu Asp Ala Val Phe Ser Cys Ser Leu Phe Pro Glu
35 40 45

Thr Ser Ala Glu Ala Met Glu Val Arg Phe Phe Arg Asn Gln Phe
50 55 60

His Ala Val Val His Leu Tyr Arg Asp Gly Glu Asp Trp Glu Ser
65 70 75

Lys Gln Met Pro Gln Tyr Arg Gly Arg Thr Glu Phe Val Lys Asp
80 85 90

Ser Ile Ala Gly Gly Arg Val Ser Leu Arg Leu Lys Asn Ile Thr
95 100 105

Pro Ser Asp Ile Gly Leu Tyr Gly Cys Trp Phe Ser Ser Gln Ile
110 115 120

Tyr Asp Glu Glu Ala Thr Trp Glu Leu Arg Val Ala Ala Leu Gly
125 130 135

Ser Leu Pro Leu Ile Ser Ile Val Gly Tyr Val Asp Gly Gly Ile
140 145 150

Gln Leu Leu Cys Leu Ser Ser Gly Trp Phe Pro Gln Pro Thr Ala
155 160 165

Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Ser Asp Ser Arg

Sequence Listing - P3230R1C1.txt

170	175	180
Ala Asn Ala Asp Gly Tyr Ser Leu Tyr Asp Val Glu Ile Ser Ile		
185	190	195
Ile Val Gln Glu Asn Ala Gly Ser Ile Leu Cys Ser Ile His Leu		
200	205	210
Ala Glu Gln Ser His Glu Val Glu Ser Lys Val Leu Ile Gly Glu		
215	220	225
Thr Phe Phe Gln Pro Ser Pro Trp Arg Leu Ala Ser Ile Leu Leu		
230	235	240
Gly Leu Leu Cys Gly Ala Leu Cys Gly Val Val Met Gly Met Ile		
245	250	255
Ile Val Phe Phe Lys Ser Lys Gly Lys Ile Gln Ala Glu Leu Asp		
260	265	270
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys		
275	280	285
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys		
290	295	300
Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro		
305	310	315
Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val		
320	325	330
Val Ala Ser Gln Gly Phe Gln Ala Gly Arg His Tyr Trp Glu Val		
335	340	345
Asp Val Gly Gln Asn Val Gly Trp Tyr Val Gly Val Cys Arg Asp		
350	355	360
Asp Val Asp Arg Gly Lys Asn Asn Val Thr Leu Ser Pro Asn Asn		
365	370	375
Gly Tyr Trp Val Leu Arg Leu Thr Thr Glu His Leu Tyr Phe Thr		
380	385	390
Phe Asn Pro His Phe Ile Ser Leu Pro Pro Ser Thr Pro Pro Thr		
395	400	405
Arg Val Gly Val Phe Leu Asp Tyr Glu Gly Gly Thr Ile Ser Phe		
410	415	420
Phe Asn Thr Asn Asp Gln Ser Leu Ile Tyr Thr Leu Leu Thr Cys		
425	430	435
Gln Phe Glu Gly Leu Leu Arg Pro Tyr Ile Gln His Ala Met Tyr		
440	445	450

Sequence Listing - P3230R1C1.txt

Asp Glu Glu Lys Gly Thr Pro Ile Phe Ile Cys Pro Val Ser Trp
455 460 465

Gly

<210> 105

<211> 2103

<212> DNA

<213> Homo Sapien

<400> 105

ccttcacagg actcttcatt gctggttggc aatgatgtat cggccagatg 50
tggtgagggc taggaaaaga gtttgttggg aaccctgggt tatcggcctc 100
gtcatcttca tatccctgat tgcctcggca gtgtgcattg gactcactgt 150
tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200
tgtcatttac aactgacaaa ctatatgctg agtttggcag agaggcttct 250
aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300
attttataaa tctccattaa gggaagaatt tgtcaagtct caggttatca 350
agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400
agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450
tgttttacat gaaaagctgc aagatgctgt aggaccccct aaagtagatc 500
ctcactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550
ctaaaccatt gctgcggaac acgaagaagt aaaactctag gtcagagtct 600
caggatcggt ggtgggacag aagtagaaga ggggtgaatgg ccctggcagg 650
ctagcctgca gtgggatggg agtcatcgct gtggagcaac cttaatat 700
gccacatggc ttgtgagtgc tgctcactgt ttacaacat ataagaaccc 750
tgccagatgg actgcttcct ttggagtaac aataaaacct tcgaaaatga 800
aacgggggtct ccggagaata attgtccatg aaaaatacaa acacccatca 850
catgactatg atatttctct tgcagagctt tctagccctg ttcctacac 900
aatgcagta catagagttt gtctccctga tgcctcctat gagtttcaac 950
caggatgatg gatgtttgtg acaggatttg gagcactgaa aatgatggt 1000
tacagtcaaa atcatcttcg acaagcacag gtgactctca tagacgctac 1050
aacttgcaat gaacctcaag ctacaatga cgccataact cctagaatgt 1100

Sequence Listing - P3230R1C1.txt

tatgtgctgg ctccttagaa ggaaaaacag atgcatgcca gggtgactct 1150
ggaggaccac tggtagttc agatgctaga gatattcggg accttgctgg 1200
aatagtgagc tggggagatg aatgtgcaa acccaacaag cctgggtgtt 1250
atactagagt tacggccttg cgggactgga ttacttcaa aactggtatc 1300
taagagacaa aagcctcatg gaacagataa cttttttt tgtttttgg 1350
gtgtggaggc cttttttaga gatacagaat tggagaagac ttgaaaaca 1400
gctagatttg actgatctca ataaactggt tgcttgatgc atgtatttc 1450
ttccagctc tgtccgcac gtaagcatcc tgcttctgcc agatcaactc 1500
tgtcatctgt gagcaatagt tgaaacttta tgtacataga gaaatagata 1550
atacaatatt acattacagc ctgtattcat ttgttctta gaagtttgt 1600
cagaatttg acttggtgac ataaattgt aatgcatata tacaattga 1650
agcactcctt ttcttcagtt cctcagctcc tctcattca gcaaatatcc 1700
atttcaagg tgcagaacaa ggagtgaag aaaatataag aagaaaaaaa 1750
tccctacat ttattggca cagaaaagta ttaggtgtt ttcttagtgg 1800
aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850
aataccaatc acttcatcat ttaggaagta tgggaactaa gtaaggaag 1900
tccagaaaga agccaagata tatccttatt ttcattcca aacaactact 1950
atgataaatg tgaagaagat tctgttttt tgtagctat aataattata 2000
caaacttcat gcaatgtact tgttctaagc aaattaaagc aaatatttat 2050
ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
cca 2103

<210> 106

<211> 423

<212> PRT

<213> Homo Sapien

<400> 106

Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys
1 5 10 15

Trp Glu Pro Trp Val Ile Gly Leu Val Ile Phe Ile Ser Leu Ile
20 25 30

Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr

Sequence Listing - P3230R1C1.txt

35	40	45
Asn Gln Lys Lys Thr Tyr	Asn Tyr Tyr Ser Thr	Leu Ser Phe Thr
50	55	60
Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn		
65	70	75
Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala		
80	85	90
Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val		
95	100	105
Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu		
110	115	120
Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp		
125	130	135
Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val		
140	145	150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile		
155	160	165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr		
170	175	180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly		
185	190	195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln		
200	205	210
Trp Asp Gly Ser His Arg Cys Gly Ala Thr Leu Ile Asn Ala Thr		
215	220	225
Trp Leu Val Ser Ala Ala His Cys Phe Thr Thr Tyr Lys Asn Pro		
230	235	240
Ala Arg Trp Thr Ala Ser Phe Gly Val Thr Ile Lys Pro Ser Lys		
245	250	255
Met Lys Arg Gly Leu Arg Arg Ile Ile Val His Glu Lys Tyr Lys		
260	265	270
His Pro Ser His Asp Tyr Asp Ile Ser Leu Ala Glu Leu Ser Ser		
275	280	285
Pro Val Pro Tyr Thr Asn Ala Val His Arg Val Cys Leu Pro Asp		
290	295	300
Ala Ser Tyr Glu Phe Gln Pro Gly Asp Val Met Phe Val Thr Gly		
305	310	315

Sequence Listing - P3230R1C1.txt

Phe Gly Ala Leu Lys Asn Asp Gly Tyr Ser Gln Asn His Leu Arg
320 325 330

Gln Ala Gln Val Thr Leu Ile Asp Ala Thr Thr Cys Asn Glu Pro
335 340 345

Gln Ala Tyr Asn Asp Ala Ile Thr Pro Arg Met Leu Cys Ala Gly
350 355 360

Ser Leu Glu Gly Lys Thr Asp Ala Cys Gln Gly Asp Ser Gly Gly
365 370 375

Pro Leu Val Ser Ser Asp Ala Arg Asp Ile Trp Tyr Leu Ala Gly
380 385 390

Ile Val Ser Trp Gly Asp Glu Cys Ala Lys Pro Asn Lys Pro Gly
395 400 405

Val Tyr Thr Arg Val Thr Ala Leu Arg Asp Trp Ile Thr Ser Lys
410 415 420

Thr Gly Ile

<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

agagaaagaa gcgtctccag ctgaagccaa tgcagccctc cggtctccg 50

cgaagaagtt ccttgccccg atgagcccc gccgtgcgtc cccgactatc 100

cccaggcggg cggtggggcac cgggcccagc gccgacgatc gctgccgttt 150

tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200

gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgctgtctct 250

acgccctcaa tctgctcttt tggtaaatgt ccatcagtgt gttggcagtt 300

tctgcttggg tgagggacta cctaaataat gttctcactt taactgcaga 350

aacgagggta gaggaagcag tcattttgac ttactttcct gtggttcac 400

cggtcacgat tgctgtttgc tgtttcctta tcattgtggg gatgttagga 450

tattgtggaa cggtgaaaag aaatctgttg cttcttgcac ggtactttgg 500

aagtttgctt gtcattttct gtgtagaact ggcttgggc gtttggacat 550

atgaacagga acttatgggt ccagtacaat ggtagatat ggtcactttg 600

Sequence Listing - P3230R1C1.txt

aaagccagga tgacaaatta tggattacct agatatcggg ggcttactca 650
tgcttggaat tttttcaga gagagtttaa gtgctgtgga gtagtatatt 700
tcactgactg gttggaaatg acagagatgg actggcccc agattcctgc 750
tgtgttagag aattcccagg atgttccaaa caggcccacc aggaagatct 800
cagtgcctt tatcaagagg gttgtgggaa gaaaatgtat tccttttga 850
gaggaaccaa acaactgcag gtgctgaggt ttctgggaat ctccattggg 900
gtgacacaaa tcctggccat gattctcacc attactctgc tctgggctct 950
gtattatgat agaagggagc ctgggacaga ccaaattgat tcctgaaga 1000
atgacaactc tcagcacctg tcatgtccct cagtagaact gttgaaacca 1050
agcctgtcaa gaatcttga acacacatcc atggcaaaca gctttaatac 1100
acactttgag atggaggagt tataaaaaga aatgtcacag aagaaaacca 1150
caaacttgtt ttattggact tgtgaatttt tgagtacata ctatgtgtt 1200
cagaaatatg tagaaataaa aatgttgcca taaaataaca cctaagcata 1250
tactattcta tgcttataaa tgaggatgga aaagtttcat gtcataagtc 1300
accacctgga caataattga tgccttaaa atgctgaaga cagatgtcat 1350
accactgtg tagcctgtgt atgacttta ctgaacacag ttatgttttg 1400
aggcagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450
atgggtgggac tggagccata gtaaagggtg atttacttct accaactagt 1500
atataaagta ctaattaaat gctaacatag gaagttagaa aatactaata 1550
acttttatta ctacgcgac tattcttctg atgctaaata aattatatat 1600
cagaaaactt tcaatattgg tgactaccta aatgtgattt ttgctgggta 1650
ctaaaatatt cttaccactt aaaagagcaa gctaacacat tgtcttaagc 1700
tgatcagga tttttgtat ataagtctgt gttaaactcg tataattcag 1750
tcgatttcag ttctgataat gttaagaata accattatga aaaggaaaat 1800
ttgtcctgta tagcatcatt attttagcc ttctctgtta ataaagcttt 1850
actattctgt cctgggctta tattacacat ataactgtta tttaaatact 1900
taaccactaa ttttggaaat taccagtgtg atacatagga atcattattc 1950
agaatgtagt ctggtcttta ggaagtatta ataagaaaat ttgcacataa 2000

Sequence Listing - P3230R1C1.txt

cttagttgat tcagaaagga ctgtatgct gttttctcc caaatgaaga 2050
 ctctttttga cactaaacac ttttaaaaa gcttatcttt gccttctcca 2100
 aacaagaagc aatagtctcc aagtcaatat aaattctaca gaaaatagtg 2150
 ttctttttct ccagaaaaat gcttgtgaga atcattaaaa catgtgacaa 2200
 tttagagatt ctttgtttta tttcactgat taatatactg tggcaaatta 2250
 cacagattat taaatTTTT tacaagagta tagtatattt atttgaaatg 2300
 ggaaaagtgc attttactgt attttgtgta ttttgtttat ttctcagaat 2350
 atggaaaagaa aattaaaatg tgtcaataaa tattttctag agagtaa 2397

<210> 108

<211> 305

<212> PRT

<213> Homo Sapien

<400> 108

Met Ala Arg Glu Asp Ser Val Lys Cys Leu Arg Cys Leu Leu Tyr
 1 5 10 15

Ala Leu Asn Leu Leu Phe Trp Leu Met Ser Ile Ser Val Leu Ala
 20 25 30

Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
 35 40 45

Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe
 50 55 60

Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile
 65 70 75

Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu
 80 85 90

Leu Leu Leu Ala Trp Tyr Phe Gly Ser Leu Leu Val Ile Phe Cys
 95 100 105

Val Glu Leu Ala Cys Gly Val Trp Thr Tyr Glu Gln Glu Leu Met
 110 115 120

Val Pro Val Gln Trp Ser Asp Met Val Thr Leu Lys Ala Arg Met
 125 130 135

Thr Asn Tyr Gly Leu Pro Arg Tyr Arg Trp Leu Thr His Ala Trp
 140 145 150

Asn Phe Phe Gln Arg Glu Phe Lys Cys Cys Gly Val Val Tyr Phe
 155 160 165

Thr Asp Trp Leu Glu Met Thr Glu Met Asp Trp Pro Pro Asp Ser

Sequence Listing - P3230R1C1.txt

170	175	180
Cys Cys Val Arg Glu Phe Pro Gly Cys Ser Lys Gln Ala His Gln		
185	190	195
Glu Asp Leu Ser Asp Leu Tyr Gln Glu Gly Cys Gly Lys Lys Met		
200	205	210
Tyr Ser Phe Leu Arg Gly Thr Lys Gln Leu Gln Val Leu Arg Phe		
215	220	225
Leu Gly Ile Ser Ile Gly Val Thr Gln Ile Leu Ala Met Ile Leu		
230	235	240
Thr Ile Thr Leu Leu Trp Ala Leu Tyr Tyr Asp Arg Arg Glu Pro		
245	250	255
Gly Thr Asp Gln Met Met Ser Leu Lys Asn Asp Asn Ser Gln His		
260	265	270
Leu Ser Cys Pro Ser Val Glu Leu Leu Lys Pro Ser Leu Ser Arg		
275	280	285
Ile Phe Glu His Thr Ser Met Ala Asn Ser Phe Asn Thr His Phe		
290	295	300
Glu Met Glu Glu Leu		
305		

<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

ccaaggccag agctgtggac accttatccc actcatcctc atcctcttcc 50

tctgataaag cccctaccag tgctgataaa gtctttctcg tgagagccta 100

gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

agtattaaga ggattttcca gtgtttctgg cagttgggcc agaaggatgc 200

ctccattcct gttctcacc tgcctcttca tcacaggcac ctccgtgtca 250

cccgtggccc tagatccttg ttctgcttac atcagcctga atgagccctg 300

gaggaacact gaccaccagt tggatgagtc tcaaggtcct cctctatgtg 350

acaaccatgt gaatggggag tgggtaccact tcacggggcat ggcgggagat 400

gcatgccta cttctgcat accagaaaac cactgtggaa cccacgcacc 450

tgtctggctc aatggcagcc accccctaga aggcgacggc attgtgcaac 500

Sequence Listing - P3230R1C1.txt

gccaggcttg tgccagcttc aatgggaact gctgtctctg gaacaccacg 550
gtggaagtca aggcttgccc tggaggctac tatgtgtatc gtctgaccaa 600
gcccagcgtc tgctccacg tctactgtgg tcatttttat gacatctgcg 650
acgaggactg ccatggcagc tgctcagata ccagcgagtg cacatgcgct 700
ccaggaactg tgctaggccc tgacaggcag acatgctttg atgaaaatga 750
atgtgagcaa aacaacggtg gctgcagtga gatctgtgtg aacctcaaaa 800
actcctaccg ctgtgagtgt ggggttgccc gtgtgctaag aagtgatggc 850
aagacttgtg aagacgttga aggatgccac aataacaatg gtggctgcag 900
ccactcttgc cttggatctg agaaaggcta ccagtgtgaa tgtccccggg 950
gcctggtgct gtctgaggat aaccacactt gccaagtccc tgtgttgtgc 1000
aatcaaatg ccattgaagt gaacatcccc agggagctgg ttggtggcct 1050
ggagctcttc ctgaccaaca cctcctgccg aggagtgtcc aacggcaccc 1100
atgtcaacat cctcttctct ctcaagacat gtggtacagt ggtcgatgtg 1150
gtgaatgaca agattgtggc cagcaacctc gtgacaggtc tacccaagca 1200
gacccccggg agcagcgggg acttcatcat ccgaaccagc aagctgctga 1250
tcccggtgac ctgcgagttt ccacgcctgt acaccatttc tgaaggatac 1300
gttccaacc ttcgaaactc cccactggaa atcatgagcc gaaatcatgg 1350
gatcttcca ttcactctgg agatcttcaa ggacaatgag tttgaagagc 1400
cttaccggga agctctgccc accctcaagc ttcgtgactc cctctacttt 1450
ggcattgagc ccgtggtgca cgtgagcggc ttggaaagct tgggtggagag 1500
ctgctttgcc accccacct ccaagatcga cgaggctctg aaatactacc 1550
tcatccggga tggctgtgtt tcagatgact cggtaaagca gtacacatcc 1600
cgggatcacc tagcaaagca cttccaggtc cctgtcttca agtttgtggg 1650
caaagaccac aaggaagtgt ttctgactg ccgggttctt gtctgtggag 1700
tgttggacga gcgttcccg tgtgcccagg gttgccaccg gcgaatgcgt 1750
cgtggggcag gaggagagga ctacggcgg ctacagggcc agacgctaac 1800
aggcggcccc atccgcatcg actgggagga ctagtctgta gccatactc 1850
gagtcctgc attggacggc tctgtctttt ggagcttctc cccccaccg 1900

Sequence Listing - P3230R1C1.txt

cctctaagaa catctgccaa cagctgggtt cagacttcac actgtgagtt 1950
cagactccca gcaccaactc actctgattc tgggtccattc agtgggcaca 2000
ggtcacagca ctgctgaaca atgtggcctg ggtgggggtt catctttcta 2050
gggttgaaaa ctaaactgtc caccagaaa gacactcacc ccatttcct 2100
catttcttc ctacacttaa atacctctg tatggtgcaa tcagaccaca 2150
aatcagaag ctgggtataa tatttcaagt tacaaccct agaaaaatta 2200
aacagttact gaaattatga cttaaatacc caatgactcc ttaaataatgt 2250
aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300
ggaatttga agtgtatcaa taaaacagta tataatttt 2339

<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr
1 5 10 15

Ser Val Ser Pro Val Ala Leu Asp Pro Cys Ser Ala Tyr Ile Ser
20 25 30

Leu Asn Glu Pro Trp Arg Asn Thr Asp His Gln Leu Asp Glu Ser
35 40 45

Gln Gly Pro Pro Leu Cys Asp Asn His Val Asn Gly Glu Trp Tyr
50 55 60

His Phe Thr Gly Met Ala Gly Asp Ala Met Pro Thr Phe Cys Ile
65 70 75

Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp Leu Asn Gly
80 85 90

Ser His Pro Leu Glu Gly Asp Gly Ile Val Gln Arg Gln Ala Cys
95 100 105

Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val Glu
110 115 120

Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys
125 130 135

Pro Ser Val Cys Phe His Val Tyr Cys Gly His Phe Tyr Asp Ile
140 145 150

Cys Asp Glu Asp Cys His Gly Ser Cys Ser Asp Thr Ser Glu Cys

Sequence Listing - P3230R1C1.txt

155	160	165
Thr Cys Ala Pro Gly Thr Val Leu Gly Pro Asp Arg Gln Thr Cys		
170	175	180
Phe Asp Glu Asn Glu Cys Glu Gln Asn Asn Gly Gly Cys Ser Glu		
185	190	195
Ile Cys Val Asn Leu Lys Asn Ser Tyr Arg Cys Glu Cys Gly Val		
200	205	210
Gly Arg Val Leu Arg Ser Asp Gly Lys Thr Cys Glu Asp Val Glu		
215	220	225
Gly Cys His Asn Asn Asn Gly Gly Cys Ser His Ser Cys Leu Gly		
230	235	240
Ser Glu Lys Gly Tyr Gln Cys Glu Cys Pro Arg Gly Leu Val Leu		
245	250	255
Ser Glu Asp Asn His Thr Cys Gln Val Pro Val Leu Cys Lys Ser		
260	265	270
Asn Ala Ile Glu Val Asn Ile Pro Arg Glu Leu Val Gly Gly Leu		
275	280	285
Glu Leu Phe Leu Thr Asn Thr Ser Cys Arg Gly Val Ser Asn Gly		
290	295	300
Thr His Val Asn Ile Leu Phe Ser Leu Lys Thr Cys Gly Thr Val		
305	310	315
Val Asp Val Val Asn Asp Lys Ile Val Ala Ser Asn Leu Val Thr		
320	325	330
Gly Leu Pro Lys Gln Thr Pro Gly Ser Ser Gly Asp Phe Ile Ile		
335	340	345
Arg Thr Ser Lys Leu Leu Ile Pro Val Thr Cys Glu Phe Pro Arg		
350	355	360
Leu Tyr Thr Ile Ser Glu Gly Tyr Val Pro Asn Leu Arg Asn Ser		
365	370	375
Pro Leu Glu Ile Met Ser Arg Asn His Gly Ile Phe Pro Phe Thr		
380	385	390
Leu Glu Ile Phe Lys Asp Asn Glu Phe Glu Glu Pro Tyr Arg Glu		
395	400	405
Ala Leu Pro Thr Leu Lys Leu Arg Asp Ser Leu Tyr Phe Gly Ile		
410	415	420
Glu Pro Val Val His Val Ser Gly Leu Glu Ser Leu Val Glu Ser		
425	430	435

Sequence Listing - P3230R1C1.txt

Cys Phe Ala Thr Pro Thr Ser Lys Ile Asp Glu Val Leu Lys Tyr
440 445 450

Tyr Leu Ile Arg Asp Gly Cys Val Ser Asp Asp Ser Val Lys Gln
455 460 465

Tyr Thr Ser Arg Asp His Leu Ala Lys His Phe Gln Val Pro Val
470 475 480

Phe Lys Phe Val Gly Lys Asp His Lys Glu Val Phe Leu His Cys
485 490 495

Arg Val Leu Val Cys Gly Val Leu Asp Glu Arg Ser Arg Cys Ala
500 505 510

Gln Gly Cys His Arg Arg Met Arg Arg Gly Ala Gly Gly Glu Asp
515 520 525

Ser Ala Gly Leu Gln Gly Gln Thr Leu Thr Gly Gly Pro Ile Arg
530 535 540

Ile Asp Trp Glu Asp
545

<210> 111

<211> 2063

<212> DNA

<213> Homo Sapien

<400> 111

gagagaggca gcagcttgct cagcggacaa ggatgctggg cgtgagggac 50

caaggcctgc cctgcactcg ggcctcctcc agccagtgc gaccagggac 100

ttctgacctg ctggccagcc aggacctgtg tggggaggcc ctctgctgc 150

cttgggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200

agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250

cgatgtcaaa ccctgcgca aaccccgat cccatggag accttcagaa 300

agtggtggat ccccatcatc atagcactac tgagcctggc gattatcatc 350

attgtggttg tcctcatcaa ggtgattctg gataaatact acttcctctg 400

cgggcagcct ctccacttca tcccaggagaa gcagctgtgt gacggagagc 450

tggactgtcc cttgggggag gacgaggagc actgtgtcaa gagcttcccc 500

gaagggcctg cagtggcagt ccgcctctcc aaggaccgat ccacactgca 550

ggtgctggac tcggccacag ggaactgggt ctctgcctgt ttcgacaact 600

Sequence Listing - P3230R1C1.txt

tcacagaagc tctcgctgag acagcctgta ggcagatggg ctacagcaga 650
gctgtggaga ttggcccaga ccaggatctg gatgttggtg aaatcacaga 700
aaacagccag gagcttcgca tgcggaactc aagtgggccc tgtctctcag 750
gctccctggt ctccctgcac tgtcttcct gtgggaagag cctgaagacc 800
ccccgtgtgg tgggtgggga ggaggcctct gtggattctt ggccttgga 850
ggtcagcatc cagtagaca aacagcacgt ctgtggaggg agcatcctgg 900
acccccactg ggtcctcacg gcagcccact gcttcaggaa acataccgat 950
gtgttcaact ggaaggtgcg ggcaggctca gacaaactgg gcagcttccc 1000
atccctggct gtggccaaga tcatcatcat tgaattcaac cccatgtacc 1050
ccaaagacaa tgacatgcc ctcatgaagc tgcaattccc actcactttc 1100
tcaggcacag tcaggcccat ctgtctgccc ttctttgatg aggagctcac 1150
tccagccacc ccactctgga tcattggatg gggctttacg aagcagaatg 1200
gaggggaagat gtctgacata ctgtgcagg cgtcagtcca ggtcattgac 1250
agcacacggt gcaatgcaga cgatgcgtac cagggggaag tcaccgagaa 1300
gatgatgtgt gcaggcatcc cggaaggggg tgtggacacc tgccaggggtg 1350
acagtgggtg gccctgatg taccaatctg accagtggca tgtggtgggc 1400
atcgtagct ggggctatgg ctgcgggggc ccgagcacc caggagtata 1450
caccaaggct tcagcctatc tcaactggat ctacaatgtc tggaaggctg 1500
agctgtaatg ctgtgcccc ttgcagtgc tgggagccgc ttccttctg 1550
ccctgcccac ctggggatcc ccaaagtca gacacagagc aagagtcccc 1600
ttgggtacac ccctctgccc acagcctcag catttcttg agcagcaaag 1650
ggcctcaatt cctgtaagag accctgcag cccagaggcg cccagaggaa 1700
gtcagcagcc ctagctcggc cacacttggg gctcccagca tcccaggag 1750
agacacagcc cactgaacaa ggtctcaggg gtattgctaa gccaagaagg 1800
aactttcca cactactgaa tggaagcagg ctgtcttgta aaagcccaga 1850
tcactgtggg ctggagagga gaaggaaagg gtctgcgcca gccctgtccg 1900
tcttcacca tcccaagcc tactagagca agaaaccagt tgtaatataa 1950
aatgcactgc cctactgttg gtatgactac cgttacctac tgttgtcatt 2000

Sequence Listing - P3230R1C1.txt

gttattacag ctatggccac tattattaaa gagctgtgta acatctctgg 2050

caaaaaaaaaaaa aaa 2063

<210> 112

<211> 432

<212> PRT

<213> Homo Sapien

<400> 112

Met Leu Gln Asp Pro Asp Ser Asp Gln Pro Leu Asn Ser Leu Asp

1 5 10 15

Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg

20 25 30

Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser

35 40 45

Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr

50 55 60

Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln

65 70 75

Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu

80 85 90

His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg

95 100 105

Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr

110 115 120

Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu

125 130 135

Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu

140 145 150

Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn

155 160 165

Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser

170 175 180

Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu

185 190 195

Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser

200 205 210

Trp Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys

215 220 225

Sequence Listing - P3230R1C1.txt

Gly Gly Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His
230 235 240

Cys Phe Arg Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala
245 250 255

Gly Ser Asp Lys Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys
260 265 270

Ile Ile Ile Ile Glu Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp
275 280 285

Ile Ala Leu Met Lys Leu Gln Phe Pro Leu Thr Phe Ser Gly Thr
290 295 300

Val Arg Pro Ile Cys Leu Pro Phe Phe Asp Glu Glu Leu Thr Pro
305 310 315

Ala Thr Pro Leu Trp Ile Ile Gly Trp Gly Phe Thr Lys Gln Asn
320 325 330

Gly Gly Lys Met Ser Asp Ile Leu Leu Gln Ala Ser Val Gln Val
335 340 345

Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp Ala Tyr Gln Gly Glu
350 355 360

Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro Glu Gly Gly Val
365 370 375

Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Tyr Gln Ser
380 385 390

Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr Gly Cys
395 400 405

Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala Tyr
410 415 420

Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu
425 430

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

ggctggactg gaactcctgg tccaagtga tccaccgcc tcagcctccc 50

aaggtgctgt gattataggt gtaagccacc gtgtctggcc tctgaacaac 100

ttttcagca actaaaaaag ccacaggagt tgaactgcta ggattctgac 150

Sequence Listing - P3230R1C1.txt

tatgctgtgg tggctagtgc tcctactcct acctacatta aaatctgttt 200
tttgttctct tgtaactagc ctttaccttc ctaacacaga ggatctgtca 250
ctgtggctct ggcccaaacc tgaccttcac tctggaacga gaacagaggt 300
ttctaccac accgtcccct cgaagccggg gacagcctca ccttgctggc 350
ctctcgctgg agcagtgtccc tcaccaactg tctcacgtct ggaggcactg 400
actcgggcag tgcaggtagc tgagcctctt ggtagctgcg gctttcaagg 450
tgggccttgc cctggccgta gaagggattg acaagcccga agattcata 500
ggcgatggct cccactgtcc aggcattcagc cttgctgtag tcaatcactg 550
ccctggggcc aggacggggc gtggacacct gtcagaagc agtgggtgag 600
acatcacgt gcccggccat ctaacctttt catgtcctgc acatcacctg 650
atccatgggc taatctgaac tctgtccaa ggaaccaga gcttgagtga 700
gctgtggctc agaccagaa ggggtctgct tagaccacct ggtttatgtg 750
acaggacttg cattctctg gaacatgagg gaacgccgga ggaaagcaaa 800
gtggcaggga aggaacttgt gccaaattat gggtcagaaa agatggaggt 850
gttgggttat cacaaggcat cgagtctct gcattcagt gacatgtggg 900
ggaagggctg ccgatggcgc atgacacact cgggactcac ctctggggcc 950
atcagacagc cgtttccgcc ccgatccag taccagctgc tgaagggcaa 1000
ctgcaggccg atgtctcat cagccaggca gcagccaaaa tctgcgatca 1050
ccagccaggg gcagccgtct gggaaggagc aagcaaagt accatttctc 1100
ctcccctct tccctctgag aggccctct atgtccctac taaagccacc 1150
agcaagacat agctgacagg ggctaattggc tcagtgttgg cccaggaggt 1200
cagcaaggcc tgagagctga tcagaagggc ctgctgtgcg aacacggaaa 1250
tgcctccagt aagcacaggc tgcaaaatcc ccaggcaaag gactgtgtgg 1300
ctcaatttaa atcatgttct agtaattgga gctgtccca agaccaaagg 1350
agctagagct tggttcaa atgatccaag ggccctata cccaggaga 1400
ctttgatttg aatttgaac cccaaatcca aacctaagaa ccaggtgcat 1450
taagaatcag ttattgccgg gtgtgggtggc ctgtaatgcc aacattttgg 1500
gaggccgagg cgggtagatc acctgaggtc aggagttcaa gaccagcctg 1550

Sequence Listing - P3230R1C1.txt

gccaacatgg tgaaaccct gtcttacta aaaatacaaa aaaactagcc 1600
 aggcattggtg gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650
 gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
 ttcagcctga gcaacacagc gagactctgt ctcagaaaaa ataaaaaaag 1750
 aattatgggt atttgtaa 1768

<210> 114
 <211> 109
 <212> PRT
 <213> Homo Sapien

<400> 114
 Met Leu Trp Trp Leu Val Leu Leu Leu Leu Pro Thr Leu Lys Ser
 1 5 10 15
 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
 20 25 30
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
 65 70 75
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
 80 85 90
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
 95 100 105
 Arg Arg Arg Asp

<210> 115
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 115
 cagcagtggc ctctcagtc tctcaaagca aggaagaggt actgtgtgct 50
 gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
 ctaaattgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
 ttgtggactg gtgttttgta tcctggccct aactctaatt gtctgtttt 200
 gggggagcaa gcacttctgg ccggagggtac ccaaaaaagc ctatgacatg 250

Sequence Listing - P3230R1C1.txt

gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
 tgatcctgtg accagaactg aaatattcag aagcggaat ggcactgatg 350
 aaacattgga agtgcacgac tttaaaaacg gatacactgg catctacttc 400
 gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
 attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
 ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
 aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
 gacctgtat tggatcaatc ccactcta atcagtttct gagttacaag 650
 actttgagga ggagggagaa gatcttact ttctgccaa cgaaaaaaaa 700
 gggattgaac aaaatgaaca gtgggtggtc cctcaagtga aagtagagaa 750
 gacccgtcac gccagacaag caagtgagga agaactcca ataatgact 800
 atactgaaaa tggaatagaa ttgatccca tgctggatga gagagggtat 850
 tgttgatatt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900
 acctttacta ggctactacc catatcata ctgctaccaa ggaggacgag 950
 tcatctgtcg tgcacatg ccttgtaact ggtgggtggc ccgcatgctg 1000
 gggaggggtct aataggaggt ttgagctcaa atgcttaaac tgctggcaac 1050
 atataataaa tgcagtctat tcaatgaatt tctgcctatg aggcattctg 1100
 cccctggtag ccagctctcc agaattactt gtaggtaatt cctctcttca 1150
 tgttctaata aacttctaca ttatcaccaa aaaaaaaaaa aaaaaaa 1197

<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu
 1 5 10 15

Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys
 20 25 30

Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val
 35 40 45

Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys

Sequence Listing - P3230R1C1.txt

50	55	60
Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys		
65	70	75
Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe		
80	85	90
Arg Ser Gly Asn Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe		
95	100	105
Lys Asn Gly Tyr Thr Gly Ile Tyr Phe Val Gly Leu Gln Lys Cys		
110	115	120
Phe Ile Lys Thr Gln Ile Lys Val Ile Pro Glu Phe Ser Glu Pro		
125	130	135
Glu Glu Glu Ile Asp Glu Asn Glu Glu Ile Thr Thr Thr Phe Phe		
140	145	150
Glu Gln Ser Val Ile Trp Val Pro Ala Glu Lys Pro Ile Glu Asn		
155	160	165
Arg Asp Phe Leu Lys Asn Ser Lys Ile Leu Glu Ile Cys Asp Asn		
170	175	180
Val Thr Met Tyr Trp Ile Asn Pro Thr Leu Ile Ser Val Ser Glu		
185	190	195
Leu Gln Asp Phe Glu Glu Glu Gly Glu Asp Leu His Phe Pro Ala		
200	205	210
Asn Glu Lys Lys Gly Ile Glu Gln Asn Glu Gln Trp Val Val Pro		
215	220	225
Gln Val Lys Val Glu Lys Thr Arg His Ala Arg Gln Ala Ser Glu		
230	235	240
Glu Glu Leu Pro Ile Asn Asp Tyr Thr Glu Asn Gly Ile Glu Phe		
245	250	255
Asp Pro Met Leu Asp Glu Arg Gly Tyr Cys Cys Ile Tyr Cys Arg		
260	265	270
Arg Gly Asn Arg Tyr Cys Arg Arg Val Cys Glu Pro Leu Leu Gly		
275	280	285
Tyr Tyr Pro Tyr Pro Tyr Cys Tyr Gln Gly Gly Arg Val Ile Cys		
290	295	300
Arg Val Ile Met Pro Cys Asn Trp Trp Val Ala Arg Met Leu Gly		
305	310	315
Arg Val		

Sequence Listing - P3230R1C1.txt

<210> 117
<211> 2121
<212> DNA
<213> Homo Sapien

<400> 117
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ggcagcttct cgcaggcggc agggcgggcg gccaggatca tgtccaccac 100
cacatgccaa gtggtggcgt tcctctgtc catcctgggg ctggccggct 150
gcatcgcggc caccgggatg gacatgtgga gcaccagga cctgtacgac 200
aaccccgta cctccgtgtt ccagtacgaa gggctctgga ggagctgcgt 250
gaggcagagt tcaggcttca ccgaatgcag gccctattc accatcctgg 300
gacttcagc catgctgcag gcagtgcgag ccctgatgat cgtaggcata 350
gtcctgggtg ccattggcct cctggatatcc atctttgccc tgaaatgcat 400
ccgcattggc agcatggagg actctgcaa agccaacatg aactgacct 450
ccgggatcat gttcattgtc tcaggctttt gtgcaattgc tggagtgtct 500
gtgtttgcca acatgctggt gactaacttc tggatgtcca cagctaaca 550
gtacaccggc atgggtggga tggcgagac tgttcagacc aggtacacat 600
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gggggtgtga tgatgtgcat cgcctgccg ggctggcac cagaagaaac 700
caactacaaa gccgtttctt atcatgcctc aggccacagt gttgcctaca 750
agcctggagg cttcaaggcc agcactggct ttgggtcaa caccaaaaac 800
aagaagatat acgatggagg tgccgcaca gaggacgagg tacaatctta 850
tcctccaag cagactatg tgtaatgctc taagacctct cagcacgggc 900
ggaagaaact cccggagagc tcacccaaaa aacaaggaga tccatctag 950
atttcttctt gcttttgact cacagctgga agttagaaaa gcctcgattt 1000
catctttgga gaggccaaat ggtcttagcc tcagtctctg tctctaaata 1050
ttccaccata aaacagctga gttatttatg aattagaggc tatagctcac 1100
attttcaatc ctctatttct tttttaaat ataactttct actctgatga 1150
gagaatgtgg ttttaatctc tctctacat tttgatgatt tagacagact 1200

Sequence Listing - P3230R1C1.txt

ccccctcttc ctctagtca ataaacccat tgatgatcta tttccagct 1250
tatccccaag aaaacttttg aaaggaaaga gtagacccaa agatgttatt 1300
ttctgctgtt tgaattttgt ctccccaccc ccaacttggc tagtaataaa 1350
cacttactga agaagaagca ataagagaaa gatatttgta atctctccag 1400
cccatgatct cggttttctt aactgtgat cttaaaagt accaaaccaa 1450
agtcatttc agtttgaggc aaccaaact ttctactgct gttgacatct 1500
tcttattaca gcaacaccat tctaggagt ttctgagctc tccactggag 1550
tcctctttct gtcgcgggtc agaaattgtc cctagatgaa tgagaaaatt 1600
atTTTTTTta atttaagtcc taaatatagt taaaataaat aatgttttag 1650
taaaatgata cactatctct gtgaaatagc ctcacccta catgtggata 1700
gaaggaaatg aaaaaataat tgctttgaca ttgtctatat ggtactttgt 1750
aaagtcatgc ttaagtacaa attccatgaa aagctcacac ctgtaatcct 1800
agcactttgg gaggtgagg aggaaggatc acttgagccc agaagttcga 1850
gactagcctg ggcaacatgg agaagccctg tcttacaaa atacagagag 1900
aaaaaatcag ccagtcatgg tggcatacac ctgtagtccc agcattccgg 1950
gaggctgagg tgggaggatc acttgagccc agggagggtg gggctgcagt 2000
gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
gtctaaaaaa ataaaaaata aataatggaa cacagcaagt cctaggaagt 2100
aggtaaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile

1 5 10 15

Leu Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp

20 25 30

Ser Thr Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln

35 40 45

Tyr Glu Gly Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe

50 55 60

Sequence Listing - P3230R1C1.txt

Thr Glu Cys Arg Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met
65 70 75

Leu Gln Ala Val Arg Ala Leu Met Ile Val Gly Ile Val Leu Gly
80 85 90

Ala Ile Gly Leu Leu Val Ser Ile Phe Ala Leu Lys Cys Ile Arg
95 100 105

Ile Gly Ser Met Glu Asp Ser Ala Lys Ala Asn Met Thr Leu Thr
110 115 120

Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly
125 130 135

Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser
140 145 150

Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val
155 160 165

Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val
170 175 180

Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala
185 190 195

Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser
200 205 210

Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe
215 220 225

Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
230 235 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro
245 250 255

Ser Lys His Asp Tyr Val
260

<210> 119

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 119

ggaaaaactg ttcttctg tggcacagag aaccctgctt caaagcagaa 50

gtagcagttc cggagtccag ctggctaaaa ctcatccag aggataatgg 100

caacccatgc ctagaaatc gctgggctgt ttcttggtgg tggtggaatg 150

Sequence Listing - P3230R1C1.txt

gtgggcacag tggctgtcac tgtcatgcct cagtggagag tgcggcctt 200
cattgaaaac aacatcgtgg tttttgaaa cttctgggaa ggactgtgga 250
tgaattgcgt gaggcaggct aacatcagga tgcagtgcaa aatctatgat 300
tcctgctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350
tgctgcttcc gtgatgtcct tcttggttt catgatggcc atccttgga 400
tgaaatgcac cagggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450
ctgctgacgg ctggaatcat ctcatcatc acgggcatgg tggtgctcat 500
ccctgtgagc tgggttgcca atgccatcat cagagatttc tataactcaa 550
tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600
tggaccacgg cactggtgct gattgttga ggagctctgt tctgtgcgt 650
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atgcacaaac caaaaaagt tatcacaccg gaaagaagtc accgagcgtc 750
tactccagaa gtcagtatgt gtagttgtgt atgtttttt aactttacta 800
taaagccatg caaatgacaa aaatctatat tactttctca aaatggaccc 850
caaagaaact ttgatttact gttcttaact gcctaacttt aattacagga 900
actgtgcatc agctatttat gattctataa gctatttcag cagaatgaga 950
tattaaacc aatgctttga ttgttctaga aagtatagta atttgtttc 1000
taagggtggt caagcatcta ctcttttat catttacttc aaaatgacat 1050
tgctaaagac tgcattattt tactactgta atttctccac gacatagcat 1100
tatgtacata gatgagtgtg acatttatat ctcatataga gacatgctta 1150
tatggtttta tttaaaatga aatgccagtc cattacactg aataaataga 1200
actcaactat tgcttttcag ggaaatcatg gataggggtg aagaaggta 1250
ctattaattg tttaaaaaca gcttagggat taatgtcctc cattataat 1300
gaagattaaa atgaaggctt taatcagcat tgtaaaggaa attgaatggc 1350
tttctgatat gctgttttt agcctaggag ttagaaatcc taacttctt 1400
atcctcttct ccagagggt tttttttct tgtgtattaa attaacattt 1450
ttaaaacgca gatattttgt caaggggctt tgcattcaa ctgcttttcc 1500
agggtctata tcagaagaaa gataaaagtg tgatctaaga aaaagtgatg 1550

Sequence Listing - P3230R1C1.txt

gttttaggaa agtgaaaata tttttgtttt tgtatttgaa gaagaatgat 1600
gcattttgac aagaaatcat atatgtatgg atatatttta ataagtattt 1650
gagtacagac tttgaggttt catcaatata aataaaagag cagaaaaata 1700
tgtcttggtt ttcatttgct taccaaaaaa acaacaacaa aaaaagttgt 1750
cctttgagaa cttcacctgc tcctatgtgg gtacctgagt caaaattgtc 1800
atttttgttc tgtgaaaaat aaatttcctt cttgtacat ttctgtttag 1850
ttttactaaa atctgtaaat actgtatttt tctgtttatt ccaaatttga 1900
tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950
aatgaatgtg ttctatttgc ttatacatt tatattaata aattgtacat 2000
ttttctaatt 2010

<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

Met Ala Thr His Ala Leu Glu Ile Ala Gly Leu Phe Leu Gly Gly
1 5 10 15

Val Gly Met Val Gly Thr Val Ala Val Thr Val Met Pro Gln Trp
20 25 30

Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn
35 40 45

Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala Asn Ile
50 55 60

Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser Pro
65 70 75

Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
80 85 90

Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr
95 100 105

Arg Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu
110 115 120

Thr Ala Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile
125 130 135

Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn

Sequence Listing - P3230R1C1.txt

140	145	150
Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu		
155	160	165
Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly Gly Ala		
170	175	180
Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser Tyr		
185	190	195
Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His		
200	205	210
Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val		
215	220	225

<210> 121
 <211> 1257
 <212> DNA
 <213> Homo Sapien

<400> 121
 ggagagaggc gcgcggtga aaggcgatt gatgcagcct gcggcggcct 50
 cggagcgcg cggagccaga cgctgaccac gttcctctcc tcggtctct 100
 ccgctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150
 gccccgccgc ctccccgcag cggctccgcg gcctcctgct gctcctgctg 200
 ctgcagctgc ccgcgccgtc gagcgctct gagatcccca aggggaagca 250
 aaaggcgag ctccggcaga gggagggtgt ggacctgtat aatggaatgt 300
 gcttacaagg gccagcagga gtgcctgggt gagacgggag ccctggggcc 350
 aatgttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450
 actacaagca gtgttcattg agttcattga attatggcat agatcttggg 500
 aaaattgcgg agtgtacatt tacaagatg cgttcaaata gtgctctaag 550
 agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600
 agcgttggtt ttacacattc aatggagctg aatgttcagg acctcttccc 650
 attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700
 aattaatatt catcgactt cttctgtgga aggactttgt gaaggaattg 750
 gtgctggatt agtggatgtt gctatctggg ttggcacttg ttcagattac 800

Sequence Listing - P3230R1C1.txt

ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850
tgaagaacta ccaaataaa tgctttaatt ttcatttgct acctctttt 900
ttattatgcc ttggaatggt tcacttaaat gacattttaa ataagttat 950
gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccaaagt 1000
tgatttcaca ctgtttttaa atctagcatt attcattttg cttcaatcaa 1050
aagtgggttc aatattttt ttagttgggt agaatacttt cttcatagtc 1100
acattctctc aacctataat ttggaatatt gttgtgggtct tttgttttt 1150
ctcttagtat agcattttta aaaaaatata aaagctacca atctttgtac 1200
aatttgtaaa tgtaagaat tttttttata tctgttaaataaaaaattatt 1250
tccaaca 1257

<210> 122
<211> 243
<212> PRT
<213> Homo Sapien

<400> 122
Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly
1 5 10 15
Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala
20 25 30
Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
35 40 45
Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala
50 55 60
Gly Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro
65 70 75
Gly Thr Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys
80 85 90
Gly Glu Cys Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn
95 100 105
Tyr Lys Gln Cys Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu
110 115 120
Gly Lys Ile Ala Glu Cys Thr Phe Thr Lys Met Arg Ser Asn Ser
125 130 135
Ala Leu Arg Val Leu Phe Ser Gly Ser Leu Arg Leu Lys Cys Arg
140 145 150

Sequence Listing - P3230R1C1.txt

Asn Ala Cys Cys Gln Arg Trp Tyr Phe Thr Phe Asn Gly Ala Glu
 155 160 165

Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile Ile Tyr Leu Asp Gln
 170 175 180

Gly Ser Pro Glu Met Asn Ser Thr Ile Asn Ile His Arg Thr Ser
 185 190 195

Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly Leu Val Asp
 200 205 210

Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys Gly Asp
 215 220 225

Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu Glu
 230 235 240

Leu Pro Lys

<210> 123
 <211> 2379
 <212> DNA
 <213> Homo Sapien

<400> 123
 gctgagcgtg tgcgcggtac ggggctctcc tgccttctgg gctccaacgc 50
 agctctgtgg ctgaactggg tgctcatcac gggaactgct gggctatgga 100
 atacagatgt ggcagctcag gtagcccaa attgcctgga agaatacatc 150
 atgtttttcg ataagaagaa attgtaggat ccagtttttt tttaaccgc 200
 cccctcccca cccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250
 atgaagatcc tattacctag gaagattttg atgttttgct gcgaatgcgg 300
 tggtgggatt tattgttct tggagtgttc tgcgtggctg gcaaagaata 350
 atgttccaaa atcgggtccat ctccaaggg gtccaatttt tcttctggg 400
 tgtcagcgag ccctgactca ctacagtga gctgacaggg gctgtcatgc 450
 aactggcccc taagccaaag caaaagacct aaggacgacc ttgaacaat 500
 acaaaggatg ggtttcaatg taattaggct actgagcgga tcagctgtag 550
 cactgggtat agccccact gtcttactga caatgcttc ttctgccgaa 600
 cgaggatgcc ctaagggctg taggtgtgaa ggcaaatgg tatattgtga 650
 atctcagaaa ttacaggaga taccctcaag tatactgct gggtgcttag 700

Sequence Listing - P3230R1C1.txt

gtttgtccct tcgtataac agccttcaaa aacttaagta taatcaattt 750
aaagggtcacc accagctcac ctggctatac ctgaccata accatatcag 800
caatattgac gaaaatgctt ttaatggaat acgcagactc aaagagctga 850
ttcttagttc caatagaatc tcctattttc ttaacaatac cttcagacct 900
gtgacaaatt tacggaactt ggatctgtcc tataatcagc tgcattctct 950
gggatctgaa cagtttcggg gcttgcgga gctgctgagt ttacatttac 1000
ggcttaactc cctgagaacc atccctgtgc gaatattcca agactgccgc 1050
aacctggaac ttttgacct gggatataac cggatccgaa gtttagccag 1100
gaatgtcttt gctggcatga tcagactcaa agaacttcac ctggagcaca 1150
atcaattttc caagctcaac ctggcccttt ttccaagggt ggtcagcctt 1200
cagaaccttt acttgcagtg gaataaaatc agtgtcatag gacagaccat 1250
gtcctggacc tggagctcct tacaaggct tgatttatca ggcaatgaga 1300
tcgaagcttt cagtggaccc agtgtttcc agtgtgtccc gaatctgcag 1350
cgcctcaacc tggattccaa caagctcaca ttattggtc aagagatttt 1400
ggattcttgg atatccctca atgacatcag tcttgctggg aatatatggg 1450
aatgcagcag aaatatttgc tccctgttaa actggctgaa aagttttaa 1500
ggctaaaggg agaatacaat tatctgtgcc agtcccaaag agctgcaagg 1550
agtaaagtgt atcgatgcag tgaagaacta cagcatctgt ggcaaaagta 1600
ctacagagag gtttgatctg gccagggtc tcccaaagcc gacgtttaag 1650
cccaagctcc ccaggccgaa gcatgagagc aaacccctt tgccccgac 1700
ggtgggagcc acagagcccg gccagagac cgatgctgac gccgagcaca 1750
tctctttcca taaaatcatc gcgggcagcg tggcgcttt cctgtccgtg 1800
ctcgtcatcc tgctggttat ctacgtgtca tggaagcgg accctgcgag 1850
catgaagcag ctgcagcagc gctccctcat gcgaaggcac aggaaaaaga 1900
aaagacagtc ctaaagcaa atgactccca gcaccagga attttatgta 1950
gattataaac ccaccaacac ggagaccagc gagatgctgc tgaatgggac 2000
gggacctgc acctataaca aatcgggctc caggagtgat gaggtatgaa 2050
ccattgtgat aaaaagagct cttaaagct gggaaataag tgggtgctta 2100

Sequence Listing - P3230R1C1.txt

ttgaactctg gtgactatca agggaacgcg atgcccccc tccccttccc 2150
tctccctctc actttggtgg caagatcctt ccttgccgt tttagtcat 2200
tcataatact ggtcattttc ctctcataca taatcaaccc attgaaattt 2250
aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300
ttgtataaga ccctttactg attccattaa tgtcgcattt gttttaagat 2350
aaaacttctt tcataggtaa aaaaaaaaa 2379

<210> 124

<211> 513

<212> PRT

<213> Homo Sapien

<400> 124

Met Gly Phe Asn Val Ile Arg Leu Leu Ser Gly Ser Ala Val Ala

1 5 10 15

Leu Val Ile Ala Pro Thr Val Leu Leu Thr Met Leu Ser Ser Ala

20 25 30

Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val

35 40 45

Tyr Cys Glu Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser

50 55 60

Ala Gly Cys Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys

65 70 75

Leu Lys Tyr Asn Gln Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu

80 85 90

Tyr Leu Asp His Asn His Ile Ser Asn Ile Asp Glu Asn Ala Phe

95 100 105

Asn Gly Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Arg

110 115 120

Ile Ser Tyr Phe Leu Asn Asn Thr Phe Arg Pro Val Thr Asn Leu

125 130 135

Arg Asn Leu Asp Leu Ser Tyr Asn Gln Leu His Ser Leu Gly Ser

140 145 150

Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu Ser Leu His Leu Arg

155 160 165

Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile Phe Gln Asp Cys

170 175 180

Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg Ile Arg Ser

185 190 195

Sequence Listing - P3230R1C1.txt

Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys Glu Leu
 200 205 210
 His Leu Glu His Asn Gln Phe Ser Lys Leu Asn Leu Ala Leu Phe
 215 220 225
 Pro Arg Leu Val Ser Leu Gln Asn Leu Tyr Leu Gln Trp Asn Lys
 230 235 240
 Ile Ser Val Ile Gly Gln Thr Met Ser Trp Thr Trp Ser Ser Leu
 245 250 255
 Gln Arg Leu Asp Leu Ser Gly Asn Glu Ile Glu Ala Phe Ser Gly
 260 265 270
 Pro Ser Val Phe Gln Cys Val Pro Asn Leu Gln Arg Leu Asn Leu
 275 280 285
 Asp Ser Asn Lys Leu Thr Phe Ile Gly Gln Glu Ile Leu Asp Ser
 290 295 300
 Trp Ile Ser Leu Asn Asp Ile Ser Leu Ala Gly Asn Ile Trp Glu
 305 310 315
 Cys Ser Arg Asn Ile Cys Ser Leu Val Asn Trp Leu Lys Ser Phe
 320 325 330
 Lys Gly Leu Arg Glu Asn Thr Ile Ile Cys Ala Ser Pro Lys Glu
 335 340 345
 Leu Gln Gly Val Asn Val Ile Asp Ala Val Lys Asn Tyr Ser Ile
 350 355 360
 Cys Gly Lys Ser Thr Thr Glu Arg Phe Asp Leu Ala Arg Ala Leu
 365 370 375
 Pro Lys Pro Thr Phe Lys Pro Lys Leu Pro Arg Pro Lys His Glu
 380 385 390
 Ser Lys Pro Pro Leu Pro Pro Thr Val Gly Ala Thr Glu Pro Gly
 395 400 405
 Pro Glu Thr Asp Ala Asp Ala Glu His Ile Ser Phe His Lys Ile
 410 415 420
 Ile Ala Gly Ser Val Ala Leu Phe Leu Ser Val Leu Val Ile Leu
 425 430 435
 Leu Val Ile Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser Met Lys
 440 445 450
 Gln Leu Gln Gln Arg Ser Leu Met Arg Arg His Arg Lys Lys Lys
 455 460 465

Sequence Listing - P3230R1C1.txt

Arg Gln Ser Leu Lys Gln Met Thr Pro Ser Thr Gln Glu Phe Tyr
470 475 480

Val Asp Tyr Lys Pro Thr Asn Thr Glu Thr Ser Glu Met Leu Leu
485 490 495

Asn Gly Thr Gly Pro Cys Thr Tyr Asn Lys Ser Gly Ser Arg Glu
500 505 510

Cys Glu Val

<210> 125

<211> 998

<212> DNA

<213> Homo Sapien

<400> 125

ccgttatcgt cttgcgctac tgctgaatgt ccgtcccga ggaggaggag 50
aggcttttgc cgctgacca gagatggccc cgagcgagca aattcctact 100
gtccggctgc gcggctaccg tggccgagct agcaaccttt cccctggatc 150
tcacaaaaac tcgactccaa atgcaaggag aagcagctct tgctcggttg 200
ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250
cctagggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300
cacccgccat ttacagacac gtagtgtatt ctggaggtcg aatggtcaca 350
tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400
tcccctttgg aatcagtc tggagggat gatggctggt gttattggcc 450
agtttttagc caatccaact gacctagtga aggttcagat gcaaatggaa 500
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550
tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttgggcag 600
gctgggtacc caatatacaa agagcagcac tggatgaat gggagattta 650
accacttatg atacagtga acactacttg gtattgaata caccacttga 700
ggacaatatc atgactcacg gtttatcaag tttatgttct ggactggtag 750
cttctattct gggaacacca gccgatgtca tcaaaagcag aataatgaat 800
caaccacgag ataacaagg aaggggactt ttgtataaat catcgactga 850
ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
gctttttacc atcttggtg agaatgaccc cttggtcaat ggtgttctgg 950

Sequence Listing - P3230R1C1.txt

cttacttatg aaaaaatcag agagatgagt ggagtcagtc cattttaa 998

<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

Met Ser Val Pro Glu Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln
1 5 10 15

Arg Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala
20 25 30

Thr Val Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr
35 40 45

Arg Leu Gln Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp
50 55 60

Gly Ala Arg Glu Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala
65 70 75

Leu Gly Ile Ile Glu Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly
80 85 90

Val Thr Pro Ala Ile Tyr Arg His Val Val Tyr Ser Gly Gly Arg
95 100 105

Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly Lys Ser
110 115 120

Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met
125 130 135

Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
140 145 150

Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly
155 160 165

Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile
170 175 180

Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro
185 190 195

Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr
200 205 210

Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu
215 220 225

Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu
230 235 240

Sequence Listing - P3230R1C1.txt

Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg
245 250 255

Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr
260 265 270

Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly
275 280 285

Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met
290 295 300

Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg
305 310 315

Glu Met Ser Gly Val Ser Pro Phe
320

<210> 127

<211> 1505

<212> DNA

<213> Homo Sapien

<400> 127

cgcggtatcgg acccaagcag gtcggcggcg gcggcaggag agcggccggg 50

cgtcagctcc tcgacccccg tgtcgggcta gtccagcgag gcggacgggc 100

ggcgtggggcc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150

gcgctggtga cggggggcctc ggggggcatc ggcgcggccg tggcccgggc 200

cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250

acatcgagga gctggctgct gaatgtaaga gtgcaggcta cccggggact 300

ttgatccct acagatgtga cctatcaaat gaagaggaca tccttccat 350

gttctcagct atccgttctc agcacagcgg ttagacatc tgcataca 400

atgctggctt ggccggcct gacaccctgc ttcaggcag caccagtgt 450

tggaaggaca tgttaatgt gaacgtgctg gccctcagca tctcacacg 500

ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550

ttaacatcaa tagcatgtct ggccaccgag tgttaccct gtctgtgacc 600

cacttctata gtgccacaa gtatgccgtc actgcgtga cagagggact 650

gaggcaagag cttcgggagg ccagacca catccgagcc acgtgcatct 700

ctccaggtgt ggtggagaca caattgcct taaactcca cgacaaggac 750

cctgagaagg cagctgccac ctatgagcaa atgaagtgtc taaacccga 800

Sequence Listing - P3230R1C1.txt

ggatgtggcc gaggctgtta tctacgtcct cagcaccccc gcacacatcc 850
 agattggaga catccagatg aggccacagg agcaggtgac ctagtgactg 900
 tgggagctcc tccttcctc cccacccttc atggcttgcc tcctgcctct 950
 ggattttagg tgttgatttc tggatcacgg gataccactt cctgtccaca 1000
 ccccgaccag gggctagaaa attgtttga gattttata tcattctgtc 1050
 aaattgcttc agttgtaa atgtgaaaaat ggctggggaa aggaggtggt 1100
 gtcctaatt gtttacttg ttaacttggt cttgtgcccc tgggcacttg 1150
 gcctttgtct gcttcagtg tcttccttt gacatgggaa aggagttgtg 1200
 gccaaaatcc ccattctctt gcacctcaac gtctgtggct cagggtggg 1250
 gtggcagagg gaggccttca ccttatatct gtgtgttat ccagggtccc 1300
 agacttcctc ctctgcctgc cccactgcac cctctcccc ttatctatct 1350
 ccttctggc tcccagccc agtcttggt tctgtcccc tctggggtc 1400
 atccctccac tctgactctg actatggcag cagaacacca gggcctggcc 1450
 cagtggattt catggtgatc attaaaaag aaaaatcgca accaaaaaa 1500
 aaaaa 1505

<210> 128

<211> 260

<212> PRT

<213> Homo Sapien

<400> 128

Met Ala Arg Pro Gly Met Glu Arg Trp Arg Asp Arg Leu Ala Leu
 1 5 10 15

Val Thr Gly Ala Ser Gly Gly Ile Gly Ala Ala Val Ala Arg Ala
 20 25 30

Leu Val Gln Gln Gly Leu Lys Val Val Gly Cys Ala Arg Thr Val
 35 40 45

Gly Asn Ile Glu Glu Leu Ala Ala Glu Cys Lys Ser Ala Gly Tyr
 50 55 60

Pro Gly Thr Leu Ile Pro Tyr Arg Cys Asp Leu Ser Asn Glu Glu
 65 70 75

Asp Ile Leu Ser Met Phe Ser Ala Ile Arg Ser Gln His Ser Gly
 80 85 90

Val Asp Ile Cys Ile Asn Asn Ala Gly Leu Ala Arg Pro Asp Thr

Sequence Listing - P3230R1C1.txt

95	100	105
Leu Leu Ser Gly Ser Thr Ser Gly Trp Lys Asp Met Phe Asn Val		
110	115	120
Asn Val Leu Ala Leu Ser Ile Cys Thr Arg Glu Ala Tyr Gln Ser		
125	130	135
Met Lys Glu Arg Asn Val Asp Asp Gly His Ile Ile Asn Ile Asn		
140	145	150
Ser Met Ser Gly His Arg Val Leu Pro Leu Ser Val Thr His Phe		
155	160	165
Tyr Ser Ala Thr Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu		
170	175	180
Arg Gln Glu Leu Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys		
185	190	195
Ile Ser Pro Gly Val Val Glu Thr Gln Phe Ala Phe Lys Leu His		
200	205	210
Asp Lys Asp Pro Glu Lys Ala Ala Ala Thr Tyr Glu Gln Met Lys		
215	220	225
Cys Leu Lys Pro Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu		
230	235	240
Ser Thr Pro Ala His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro		
245	250	255
Thr Glu Gln Val Thr		
260		

<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

aacttctaca tgggcctcct gctgctggtg ctcttcctca gcctcctgcc 50

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tcaggtgcag agtctcagtt gcccgaggag acctcccctc ccgaggcagt 150

ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200

tgtaaaaggc catggaactt tgggtgaatc accgatgcca ttaagaggg 250

tttctgcca ggatggaaat gttaggtcgt tctgtgtctg cgctgttcat 300

ttcagtagcc accagccacc tgtggccggt gagtgcttga aatgaggaac 350

tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400

Sequence Listing - P3230R1C1.txt

actgatagtt gtacatattt gggggtacat gtgatatttg gatacatgta 450
tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500
acatttattt tttattcttt ttagacagag tctcactctg tcacccaggc 550
tggagtgagc tgggtgccatc tcagcttact gcaacctctg cctgccaggc 600
tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650
gcaccacaat gccaactaa tttttgtatt tttagtagag acgggggttt 700
gccatgttgc ccaggctggc ctggaactcc tggcctcaaa caatccactt 750
gcctcggcct cccaaagtgt tatgattaca ggcgtgagcc accgtgcctg 800
gcctaaacat ttatcttttc ttgtgttgga gaactttgaa attatacaat 850
gaattattgt taactgtcat ctccctgctg tgctatggaa cactgggact 900
tcttcctct atctaactgt atattgtac cagttaacca accgtacttc 950
atccccactc ctctctatcc ttccaacct ctgacacct cattctactc 1000
tctacctcca tgagatccac ttttttagct cccacatgtg agtaagaaaa 1050
tgcaatattt gtctttctgt gcctggctta tttacttaa cataatgact 1100
tcctgttcca tccatgttgc tgcaaagac aggatttcgt tcttaatttc 1150
aattaaaata accacacatg gcaaaaa 1177

<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

Met Gly Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val
1 5 10 15

Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro
20 25 30

Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg
35 40 45

Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val
50 55 60

Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro
65 70 75

Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser

Sequence Listing - P3230R1C1.txt

80 85 90

Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val
95 100 105

Ala Val Glu Cys Leu Lys
110

<210> 131

<211> 2061

<212> DNA

<213> Homo Sapien

<400> 131

ttctgaagta acggaagcta ccttgataa agacctcaac actgctgacc 50
atgatcagcg cagcctggag catcttctc atcgggacta aaattgggct 100
gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
tgtgtcgctg cgatgcgggt ttcattact gtaatgatcg ctttctgaca 200
tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
caaccaaata aataatgctg ggattcctc agatttgaaa aacttgctga 300
aagtagaaag aatataccta taccacaaca gtttagatga atttctacc 350
aacctccaa agtatgtaa agagttacat ttgcaagaaa ataacataag 400
gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
atttagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500
cgagacagca actatctccg actgcttttc ctgtcccgt atcaccttag 550
cacaattccc tggggtttgc ccaggactat agaagaacta cgcttgatg 600
ataatcgcat atccactatt tcatcaccat ctctcaagg tctcactagt 650
ctaaaacgcc tggttctaga tggaaacctg ttgaacaatc atggtttagg 700
tgacaaagtt ttctcaacc tagttaattt gacagagctg tcctgggtgc 750
ggaattcctt gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800
aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850
ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900
gtaatttacc tcagggtatc ttgatgatt tggacaatat aacacaactg 950
attcttcgca acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000
tgactgggta caatcactac ctgtgaaggc caacgtgcgt gggctcatgt 1050

Sequence Listing - P3230R1C1.txt

gccaaagcccc agaaaagggtt cgtggggatgg ctattaagga tctcaatgca 1100
 gaactgtttg attgtaagga cagtggggatt gtaagcacca ttcagataac 1150
 cactgcaata cccaacacag tgtatcctgc ccaaggacag tggccagctc 1200
 cagtgaccaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250
 caaaccacag ggagtcctc aagaaaaaca attacaatta ctgtgaagtc 1300
 tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350
 ctgctttgag actcagctgg cttaaactgg gccatagccc ggcatttgga 1400
 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450
 agccctggag cctgattcac cctataaagt atgcatgggt cccatggaaa 1500
 ccagcaacct ctacctattt gatgaaactc ctgtttgtat tgagactgaa 1550
 actgcacccc ttcgaatgta caaccctaca accaccctca atcgagagca 1600
 agagaaagaa ccttacaaaa accccaattt acctttggct gccatcattg 1650
 gtggggctgt ggccttggtt accattgccc ttcttgcttt agtgtgttg 1700
 tatgttcata ggaatggatc gctcttctca aggaactgtg catatagcaa 1750
 agggaggaga agaaaggatg actatgcaga agctggcact aagaaggaca 1800
 actctatcct ggaaatcagg gaaacttctt ttcagatgtt accaataagc 1850
 aatgaaccca tctcgaagga ggagtttgta atacacacca tatttctccc 1900
 taatggaatg aatctgtaca aaaacaatca cagtgaaagc agtagtaacc 1950
 gaagctacag agacagtggg attccagact cagatcactc acactcatga 2000
 tgctgaagga ctacagcag acttggtttt tgggtttttt aaacctaagg 2050
 gaggtgatgg t 2061

<210> 132

<211> 649

<212> PRT

<213> Homo Sapien

<400> 132

Met Ile Ser Ala Ala Trp Ser Ile Phe Leu Ile Gly Thr Lys Ile

1 5 10 15

Gly Leu Phe Leu Gln Val Ala Pro Leu Ser Val Met Ala Lys Ser

20 25 30

Sequence Listing - P3230R1C1.txt

Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn
 35 40 45
 Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala
 50 55 60
 Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile
 65 70 75
 Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
 80 85 90
 Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr
 95 100 105
 Val Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr
 110 115 120
 Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu
 125 130 135
 Asp Asp Asn Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe
 140 145 150
 Arg Asp Ser Asn Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His
 155 160 165
 Leu Ser Thr Ile Pro Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu
 170 175 180
 Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile Ser Ser Pro Ser Leu
 185 190 195
 Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu Asp Gly Asn Leu
 200 205 210
 Leu Asn Asn His Gly Leu Gly Asp Lys Val Phe Phe Asn Leu Val
 215 220 225
 Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr Ala Ala
 230 235 240
 Pro Val Asn Leu Pro Gly Thr Asn Leu Arg Lys Leu Tyr Leu Gln
 245 250 255
 Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu
 260 265 270
 Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn
 275 280 285
 Leu Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu
 290 295 300
 Ile Leu Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp

Sequence Listing - P3230R1C1.txt

305	310	315
Val Arg Asp Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg		
320	325	330
Gly Leu Met Cys Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile		
335	340	345
Lys Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile		
350	355	360
Val Ser Thr Ile Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr		
365	370	375
Pro Ala Gln Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp		
380	385	390
Ile Lys Asn Pro Lys Leu Thr Lys Asp Gln Gln Thr Thr Gly Ser		
395	400	405
Pro Ser Arg Lys Thr Ile Thr Ile Thr Val Lys Ser Val Thr Ser		
410	415	420
Asp Thr Ile His Ile Ser Trp Lys Leu Ala Leu Pro Met Thr Ala		
425	430	435
Leu Arg Leu Ser Trp Leu Lys Leu Gly His Ser Pro Ala Phe Gly		
440	445	450
Ser Ile Thr Glu Thr Ile Val Thr Gly Glu Arg Ser Glu Tyr Leu		
455	460	465
Val Thr Ala Leu Glu Pro Asp Ser Pro Tyr Lys Val Cys Met Val		
470	475	480
Pro Met Glu Thr Ser Asn Leu Tyr Leu Phe Asp Glu Thr Pro Val		
485	490	495
Cys Ile Glu Thr Glu Thr Ala Pro Leu Arg Met Tyr Asn Pro Thr		
500	505	510
Thr Thr Leu Asn Arg Glu Gln Glu Lys Glu Pro Tyr Lys Asn Pro		
515	520	525
Asn Leu Pro Leu Ala Ala Ile Ile Gly Gly Ala Val Ala Leu Val		
530	535	540
Thr Ile Ala Leu Leu Ala Leu Val Cys Trp Tyr Val His Arg Asn		
545	550	555
Gly Ser Leu Phe Ser Arg Asn Cys Ala Tyr Ser Lys Gly Arg Arg		
560	565	570
Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys Lys Asp Asn Ser		
575	580	585

Sequence Listing - P3230R1C1.txt

Ile Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu Pro Ile Ser
590 595 600

Asn Glu Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr Ile Phe
605 610 615

Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser
620 625 630

Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp
635 640 645

His Ser His Ser

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

ccgtcatccc cctgcagcca ccctcccag agtcctttgc ccaggccacc 50
ccaggcttct tggcagccct gccgggccac ttgtcttcat gtctgccagg 100
gggaggtggg aaggaggtgg gaggagggcg tgcagaggca gtctgggctt 150
ggccagagct caggggtgctg agcgtgtgac cagcagtga cagaggccgg 200
ccatggccag cctggggctg ctgctcctgc tcttactgac agcactgcca 250
ccgctgtggt cctcctact gcctgggctg gacactgctg aaagtaaagc 300
caccattgca gacctgatcc tgtctgcgct ggagagagcc accgtcttcc 350
tagaacagag gctgcctgaa atcaacctgg atggcatggt ggggggtccga 400
gtgctggaag agcagctaaa aagtgtccgg gagaagtggg cccaggagcc 450
cctgctgcag ccgctgagcc tgcgcgtggg gatgctgggg gagaagtgg 500
aggctgccat ccagagatcc ctccactacc tcaagctgag tgatcccaag 550
tacctaagag agttccagct gaccctcag cccgggtttt ggaagctccc 600
acatgcctgg atccacactg atgcctcctt ggtgtacccc acgttcgggc 650
cccaggactc attctcagag gagagaagtg acgtgtgcct ggtgcagctg 700
ctgggaaccg ggacggacag cagcgagccc tgcggcctct cagacctctg 750
caggagcctc atgaccaagc ccggctgctc aggctactgc ctgtcccacc 800
aactgctctt cttcctctgg gccagaatga ggggatgcac acagggacca 850

Sequence Listing - P3230R1C1.txt

ctccaacaga gccaggacta tatcaacctc ttctgcgcca acatgatgga 900
 cttgaaccgc agagctgagg ccacgggata cgcctaccct acccgggaca 950
 tcttcatgga aaacatcatg ttctgtggaa tgggcggctt ctccgacttc 1000
 tacaagctcc ggtggctgga ggccattctc agctggcaga aacagcagga 1050
 aggatgcttc ggggagcctg atgctgaaga tgaagaatta tctaaagcta 1100
 ttcaatatca gcagcatttt tcgaggagag tgaagaggcg agaaaaacaa 1150
 tttccagatt ctcgctctgt tgctcaggct ggagtacagt ggcgcaatct 1200
 cggctcactg caacctttgc ctctggggtt caagcaattc tcttgctca 1250
 tcctcccag tagctgggac tacaggagcg tgccaccata cctggcta 1300
 ttttatattt ttttagtaga gacaggggtt catcatgttg ctcagtctgg 1350
 tctcgaactc ctgatctcaa gagatccgcc cacctcaggc tcccaaagt 1400
 tgggattata ggtgtgagcc accgtgtctg gctgaaaagc actttcaaag 1450
 agactgtgtt gaataaaggg ccaaggttct tgccaccag cactcatggg 1500
 ggctctctcc ctagatggc tgctctccc acaacacagc cacagcagt 1550
 gcagccctgg gtggcttct atacatctg gcagaatacc cccagcaaa 1600
 cagagagcca caccatcca caccgccacc accaagcagc cgctgagacg 1650
 gacgggtcca tgccagctgc ctggaggagg aacagacccc ttagtctc 1700
 atcccttaga tcctggaggg cacggatcac atctgggaa gaaggcatct 1750
 ggaggataag caaagccacc ccgacacca atcttgaag ccctgagtag 1800
 gcagggccag ggtaggtggg ggccgggagg gaccaggtg tgaacggatg 1850
 aataaagttc aactgcaact gaaaaaaaaa aa 1882

<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

Met Ser Ala Arg Gly Arg Trp Glu Gly Gly Gly Arg Arg Ala Cys
 1 5 10 15

Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val
 20 25 30

Thr Ser Ser Glu Gln Arg Pro Ala Met Ala Ser Leu Gly Leu Leu
 35 40 45

Sequence Listing - P3230R1C1.txt

Leu Leu Leu Leu Leu Thr Ala Leu Pro Pro Leu Trp Ser Ser Ser
50 55 60

Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys Ala Thr Ile Ala Asp
65 70 75

Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val Phe Leu Glu Gln
80 85 90

Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly Val Arg Val
95 100 105

Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala Gln Glu
110 115 120

Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly Glu
125 130 135

Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu
140 145 150

Ser Asp Pro Lys Tyr Leu Arg Glu Phe Gln Leu Thr Leu Gln Pro
155 160 165

Gly Phe Trp Lys Leu Pro His Ala Trp Ile His Thr Asp Ala Ser
170 175 180

Leu Val Tyr Pro Thr Phe Gly Pro Gln Asp Ser Phe Ser Glu Glu
185 190 195

Arg Ser Asp Val Cys Leu Val Gln Leu Leu Gly Thr Gly Thr Asp
200 205 210

Ser Ser Glu Pro Cys Gly Leu Ser Asp Leu Cys Arg Ser Leu Met
215 220 225

Thr Lys Pro Gly Cys Ser Gly Tyr Cys Leu Ser His Gln Leu Leu
230 235 240

Phe Phe Leu Trp Ala Arg Met Arg Gly Cys Thr Gln Gly Pro Leu
245 250 255

Gln Gln Ser Gln Asp Tyr Ile Asn Leu Phe Cys Ala Asn Met Met
260 265 270

Asp Leu Asn Arg Arg Ala Glu Ala Ile Gly Tyr Ala Tyr Pro Thr
275 280 285

Arg Asp Ile Phe Met Glu Asn Ile Met Phe Cys Gly Met Gly Gly
290 295 300

Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu Glu Ala Ile Leu Ser
305 310 315

Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp Ala Glu

Sequence Listing - P3230R1C1.txt

320	325	330
Asp Glu Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe Ser		
335	340	345
Arg Arg Val Lys Arg Arg Glu Lys Gln Phe Pro Asp Ser Arg Ser		
350	355	360
Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln		
365	370	375
Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ile Leu Pro		
380	385	390
Ser Ser Trp Asp Tyr Arg Ser Val Pro Pro Tyr Leu Ala Asn Phe		
395	400	405
Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala		
410	415	420
Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser		
425	430	435
Gln Ser Val Gly Leu		
440		

<210> 135

<211> 884

<212> DNA

<213> Homo Sapien

<400> 135

ggctctgagt cagagctgct gtcattggcgg ccgctctgtg gggcttcttt 50

cccgtctctg tgctgctgct gctatcgggg gatgtccaga gctcggaggt 100
gcccggggct gctgctgagg gatcgggagg gaggggggtc ggcattaggag 150

atcgctcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200

gactggatct cggcggcccc agtgctggtg gacggagaag agcacgtcgg 250

tttccttaag acagatggga gttttgtggt tcatgatata ctttctggat 300

cttatgtagt ggaagtgtg tctccagctt acagatttga tcccgttcga 350

gtggatatca cttcgaaagg aaaaatgaga gcaagatatg tgaattacat 400

caaaacatca gaggttgtca gactgcccta tcctctcaa atgaaatctt 450

caggccacc ttctacttt attaaaaggg aatcgtgggg ctggacagac 500

tttctaata accaatggt tatgatgatg gttcttctt tattgatatt 550

tgtgcttctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600

Sequence Listing - P3230R1C1.txt

aaatggagca gtcaatgaat atgctgaatt ccaaccatga gttgcctgat 650
 gtttctgagt tcatgacaag actcttctct tcaaaatcat ctggcaaadc 700
 tagcagcggc agcagtaaaa caggcaaaaag tggggctggc aaaaggaggt 750
 agtcaggccg tccagagctg gcatttgac aaacacggca aactgggtg 800
 gcatccaagt cttggaaaac cgtgtgaagc aactactata aacttgagtc 850
 atcccgcgt tgatctctta caactgtgta tggt 884

<210> 136

<211> 242

<212> PRT

<213> Homo Sapien

<400> 136

Met Ala Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu
 1 5 10 15

Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala
 20 25 30

Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
 35 40 45

Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
 50 55 60

Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val
 65 70 75

Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
 80 85 90

Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
 95 100 105

Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
 110 115 120

Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
 125 130 135

Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
 140 145 150

Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
 155 160 165

Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
 170 175 180

Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu

Sequence Listing - P3230R1C1.txt

185	190	195	
Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val			
200	205	210	
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys			
215	220	225	
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys			
230	235	240	

Arg Arg

<210> 137

<211> 1571

<212> DNA

<213> Homo Sapien

<400> 137

gatggcgag ccacagcttc tgtgagattc gatttctccc cagttcccct 50

gtgggtctga ggggaccaga agggtagact acgttggtt tctggaaggg 100

gaggctatat gcgtcaattc cccaaaacaa gttttgacat ttcccctgaa 150

atgtcattct ctatctattc actgcaagt cctgctgttc caggccttac 200

ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250

cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300

ttctcttcac gggagggttg gcagttttt ttactctgt ggtctccaga 350

tttcaggcct aagatgaaag ccttagtct tgccttcagc cttctctctg 400

ctgcgtttta tctctatgg actccttcca ctggactgaa gacactcaat 450

ttgggaagct gtgtgatcgc cacaacctt caggaaatac gaaatggatt 500

ttctgagata cggggcagtg tgcaagccaa agatggaaac attgacatca 550

gaatcttaag gaggactgag tctttgcaag acacaaagcc tgcgaatcga 600

tgctgcctcc tgcgccattt gctaagactc tatctggaca gggattttaa 650

aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700

ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750

atgacatgcc attgtgggga ggaagcaatg aagaaataca gccagattct 800

gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggctttgg 850

gggaactaga cattctctg caatggatgg aggagacaga ataggaggaa 900

Sequence Listing - P3230R1C1.txt

agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
acctgcagag gaggcagac cccaaaccac catctcttta ctgtactagt 1000
cttgtgctgg tcacagtga tcttatttat gcattacttg cttccttgca 1050
tgattgtctt tatgcatccc caatcttaat tgagaccata ctgtataag 1100
atTTTTgtaa tatctttctg ctattggata tatttattag ttaatatatt 1150
tatttatttt ttgctattta atgtatttat tttttactt ggacatgaaa 1200
ctttaaaaaa attcacagat tatatttata acctgactag agcaggtgat 1250
gtatttttat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300
ctaggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350
gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400
tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
aatcctacac ggccagcatg tatttctaca aataaagttt tctttgcata 1550
ccaaaaaaaa aaaaaaaaaa a 1571

<210> 138

<211> 261

<212> PRT

<213> Homo Sapien

<400> 138

Met Arg Gln Phe Pro Lys Thr Ser Phe Asp Ile Ser Pro Glu Met
1 5 10 15

Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu
20 25 30

Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
35 40 45

Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
50 55 60

Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
65 70 75

Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
80 85 90

Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
95 100 105

Sequence Listing - P3230R1C1.txt

Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
 110 115 120

Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
 125 130 135

Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu
 140 145 150

Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
 155 160 165

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe
 170 175 180

Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser
 185 190 195

Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu
 200 205 210

Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys
 215 220 225

Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln
 230 235 240

Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln
 245 250 255

Trp Met Glu Glu Thr Glu
 260

<210> 139

<211> 2395

<212> DNA

<213> Homo Sapien

<400> 139

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tcgctacctg ttgcgtagcg atcgaggtgc tagggatcgc ggtcttcctt 150

cggggattct tcccggctcc cgttcgttcc tctgccagag cggaacacgg 200

agcggagccc ccagcgcccc aacctcggc tggagccagt tctaactgga 250

ccacgctgcc accacctctc ttcagtaaag ttgttattgt tctgatagat 300

gccttgagag atgattttgt gtttgggtca aagggtgtga aatttatgcc 350

ctacacaact taccttgtgg aaaaaggagc atctcacagt tttgtggctg 400

Sequence Listing - P3230R1C1.txt

aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450
gggagccttc ctggctttgt cgacgtcatc aggaacctca attctcctgc 500
actgctggaa gacagtgtga taagacaagc aaaagcagct ggaaaaagaa 550
tagtctttta tggagatgaa acctgggtta aattattccc aaagcatttt 600
gtggaatatg atggaacaac ctcatTTTTt gtgtcagatt acacagaggt 650
ggataataat gtcacgaggc atttgataa agtattaaaa agaggagatt 700
gggacatatt aatcctccac tacctggggc tggaccacat tggccacatt 750
tcagggccca acagccccct gattgggcag aagctgagcg agatggacag 800
cgtgctgatg aagatccaca ctcactgca gtcgaaggag agagagacgc 850
ctttaccaa tttgctggtt ctttgtggtg accatggcat gtctgaaaca 900
ggaagtcacg gggcctcctc caccgaggag gtgaatacac ctctgatttt 950
aatcagttct gcgtttgaaa ggaaacccgg tgatatccga catccaaagc 1000
acgtccaata gacggatgtg gctgcgacac tggcgatagc acttggctta 1050
ccgattcaa aagacagtgt agggagcctc ctattcccag ttgtggaagg 1100
aagaccaatg agagagcagt tgagattttt acatttgaat acagtgcagc 1150
ttagtaaact gttgcaagag aatgtgccgt catatgaaaa agatcctggg 1200
tttgagcagt ttaaagtgc agaaagattg catgggaact ggatcagact 1250
gtacttggag gaaaagcatt cagaagtcct attcaacctg ggctccaagg 1300
ttctcaggca gtacctggat gctctgaaga cgctgagctt gtccctgagt 1350
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ctgcacagaa aggctgagct ggaagtcca ctgtcatctc ctgggttttc 1450
tctgctcttt tatttgggtga tcctggttct ttcggccgtt cacgtcattg 1500
tgtgcacctc agctgaaagt tcgtgtact tctgtggcct ctcgtggctg 1550
gcggcaggct gcctttcgtt taccagactc tggttgaaca cctggtgtgt 1600
gccaagtgtc ggcagtgtcc tggacagggg gcctcaggga aggacgtgga 1650
gcagccttat cccaggcctc tgggtgtccc gacacaggtg ttcacatctg 1700
tgctgtcagg tcagatgcct cagttcttgg aaagctaggt tcctgcgact 1750
gttaccaagg tgattgtaaa gagctggcgg tcacagagga acaagcccc 1800

Sequence Listing - P3230R1C1.txt

cagctgaggg ggtgtgtgaa tcggacagcc tcccagcaga ggtgtgggag 1850
 ctgcagctga ggaagaaga gacaatcggc ctggacactc aggaggggtca 1900
 aaaggagact tggtcgcacc actcatcctg ccacccccag aatgcatcct 1950
 gcctcatcag gtccagattt cttccaagg cggacgtttt ctgttggaat 2000
 tcttagtcct tggcctcgga caccttcatt cgtagctgg ggagtgggtg 2050
 tgaggcagtg aagaagaggc ggatgggtcac actcagatcc acagagccca 2100
 ggatcaaggg acccactgca gtggcagcag gactgttggg cccccacccc 2150
 aaccctgcac agccctcatc ccctcttggc ttgagccgtc agaggccctg 2200
 tgctgagtgt ctgaccgaga cactcacagc tttgtcatca gggcacaggc 2250
 ttctcggag ccaggatgat ctgtgccacg cttgcacctc gggcccatct 2300
 gggctcatgc tctctctcct gctattgaat tagtacctag ctgcacacag 2350
 tatgtagtta ccaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

Met Arg Leu Gly Ser Gly Thr Phe Ala Thr Cys Cys Val Ala Ile
 1 5 10 15

Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala
 20 25 30

Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro
 35 40 45

Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu
 50 55 60

Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala
 65 70 75

Leu Arg Asp Asp Phe Val Phe Gly Ser Lys Gly Val Lys Phe Met
 80 85 90

Pro Tyr Thr Thr Tyr Leu Val Glu Lys Gly Ala Ser His Ser Phe
 95 100 105

Val Ala Glu Ala Lys Pro Pro Thr Val Thr Met Pro Arg Ile Lys
 110 115 120

Sequence Listing - P3230R1C1.txt

Ala Leu Met Thr Gly Ser Leu Pro Gly Phe Val Asp Val Ile Arg
125 130 135

Asn Leu Asn Ser Pro Ala Leu Leu Glu Asp Ser Val Ile Arg Gln
140 145 150

Ala Lys Ala Ala Gly Lys Arg Ile Val Phe Tyr Gly Asp Glu Thr
155 160 165

Trp Val Lys Leu Phe Pro Lys His Phe Val Glu Tyr Asp Gly Thr
170 175 180

Thr Ser Phe Phe Val Ser Asp Tyr Thr Glu Val Asp Asn Asn Val
185 190 195

Thr Arg His Leu Asp Lys Val Leu Lys Arg Gly Asp Trp Asp Ile
200 205 210

Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser
215 220 225

Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp
230 235 240

Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg
245 250 255

Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly
260 265 270

Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val
275 280 285

Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro
290 295 300

Gly Asp Ile Arg His Pro Lys His Val Gln
305 310

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

ggcacgaggc aagccttcca ggttatcgtg acgcaccttg aaagtctgag 50

agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100

tgatgttact gctgctgttg gagtacaact tcctataga aaacaactgc 150

cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200

gaaattcagc attcatgacc aggatcacaa agtactgggc ctggactctg 250

Sequence Listing - P3230R1C1.txt

ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300
 ttgcattag cctcatcctt gagctcagcc tctgcggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450
 aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500
 ggctcagggt ggctcctgga acatgctgga gtcggcggct caccctggat 550
 ggttcattctg cacctcctgc aattgtaatg agcctgttgg ggtgacagat 600
 aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650
 agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700
 acgccttcct cgctaattg aactaattgt ataaaaacac caaacctgct 750
 cact 754

<210> 142
 <211> 193
 <212> PRT
 <213> Homo Sapien

<400> 142
 Met Leu Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn
 1 5 10 15
 Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu
 20 25 30
 Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu
 35 40 45
 Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr
 50 55 60
 Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser
 65 70 75
 Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys
 80 85 90
 Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His
 95 100 105
 Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala
 110 115 120
 Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln
 125 130 135
 Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp

Sequence Listing - P3230R1C1.txt

140 145 150

Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr
155 160 165

Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro
170 175 180

Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp
185 190

<210> 143

<211> 961

<212> DNA

<213> Homo Sapien

<400> 143

ctagagagta tagggcagaa ggatggcaga tgagtgactc cacatccaga 50

gctgcctccc ttaatccag gatcctgtcc ttcctgtcct gtaggagtgc 100
ctgttgccag tgtgggtga gacaagttg tccacaggg ctgtctgagc 150

agataagatt aagggtggg tctgtgtca attaactct gtgggcacgg 200

gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250

cctgccgtgg aaggaggtc tgcctgggc gctgctgtg cttctcttag 300

gctccagat cctgctgatc tatgcctggc atttcacga gcaaaggac 350

tgtgatgaac acaatgtcat ggctcgttac ctccctgcc cagtggagt 400

tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450

tggggcacat ctgaattcc tggaaggagc aggtggagtc caagactgta 500

ttctcaatgg agctactgct ggggagaact aggtgtggga aattgaaga 550

cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600

tcacctgctt cttcaccatc agcaccaggc cctggatgac tcagttcagc 650

ctctgaaca agacctgctt ggagggattc cactgagtga aaccactca 700

caggcttgtc catgtgctgc tccacattc cgtggacatc agcactactc 750

tcctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgtatcct 800

atthtgcag tgtttgagat ctgagatcag tgttttagaa aatccacaca 850

tcttgagcct aatcatgtag ttagatcat taaacatcag cattttaaga 900

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950

aaaaaaaaa a 961

Sequence Listing - P3230R1C1.txt

<210> 144

<211> 147

<212> PRT

<213> Homo Sapien

<400> 144

Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu
1 5 10 15

Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
20 25 30

Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
35 40 45

Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
50 55 60

Gln Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn
65 70 75

Ser Trp Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu
80 85 90

Leu Leu Leu Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile
95 100 105

Asp Asn Cys His Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe
110 115 120

Thr Cys Phe Phe Thr Ile Ser Thr Arg Pro Trp Met Thr Gln Phe
125 130 135

Ser Leu Leu Asn Lys Thr Cys Leu Glu Gly Phe His
140 145

<210> 145

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 145

ctgtgcagct cgaggctcca gaggcacact ccagagagag ccaaggttct 50
gacgcgatga ggaagcacct gagctggtgg tggctggcca ctgtctgcat 100
gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaagcaca 150
gaatcaagtg gaaccggaag gccctgcccc gcactgcccc gatcactgag 200
gcccggtgg ctgagaaccg cccgggagcc ttcataagc aaggccgcaa 250
gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300

Sequence Listing - P3230R1C1.txt

actggcagtt ccccgatggc atccactaca acggctgctc tgaggcta 350
 gtgaccaagg aggcatttgt caccggctgc atcaatgcca cccaggcggc 400
 gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
 tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500
 ttggagaggg ggcgaggact tcgggtcacc atgcaccagc cagtgtctct 550
 ctgccttctg gctttgatct ggctcatggt gaaataagct tgccaggagg 600
 ctggcagtag agagcgcagc agcgagcaaa tcctggcaag tgaccagct 650
 cttctcccc aaaccacgc gtgttctgaa ggtgccagg agcggcgatg 700
 cactgcact gcaaatgccg ctccacgta tgcgccctgg tatgtgctg 750
 cgttctgata gatggggggac tgtggcttct ccgtcactcc attctcagcc 800
 cctagcagag cgtctggcac actagattag tagtaaatgc ttgatgagaa 850
 gaacacatca ggcactgcgc cacctgcttc acagtacttc ccaacaactc 900
 ttagaggtag gtgtattccc gttttacaga taaggaaact gaggcccaga 950
 gagctgaagt actgcacca gcatcaccag ctagaaagtg gcagagccag 1000
 gattcaacc tggttgtct aacccagggt tttctgctct gtccaattcc 1050
 agagctgtct ggtgatcact ttatgtctca cagggacca catcacaaca 1100
 tgtatctcta atgaaattgt gaaagctcca tgtttagaaa taaatgaaaa 1150
 cacctga 1157

<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met Arg Lys His Leu Ser Trp Trp Trp Leu Ala Thr Val Cys Met
 1 5 10 15

Leu Leu Phe Ser His Leu Ser Ala Val Gln Thr Arg Gly Ile Lys
 20 25 30

His Arg Ile Lys Trp Asn Arg Lys Ala Leu Pro Ser Thr Ala Gln
 35 40 45

Ile Thr Glu Ala Gln Val Ala Glu Asn Arg Pro Gly Ala Phe Ile
 50 55 60

Lys Gln Gly Arg Lys Leu Asp Ile Asp Phe Gly Ala Glu Gly Asn

Sequence Listing - P3230R1C1.txt

65	70	75
Arg Tyr Tyr Glu Ala Asn Tyr Trp Gln Phe Pro Asp Gly Ile His		
80	85	90
Tyr Asn Gly Cys Ser Glu Ala Asn Val Thr Lys Glu Ala Phe Val		
95	100	105
Thr Gly Cys Ile Asn Ala Thr Gln Ala Ala Asn Gln Gly Glu Phe		
110	115	120
Gln Lys Pro Asp Asn Lys Leu His Gln Gln Val Leu Trp Arg Leu		
125	130	135
Val Gln Glu Leu Cys Ser Leu Lys His Cys Glu Phe Trp Leu Glu		
140	145	150
Arg Gly Ala Gly Leu Arg Val Thr Met His Gln Pro Val Leu Leu		
155	160	165
Cys Leu Leu Ala Leu Ile Trp Leu Met Val Lys		
170	175	

<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

<400> 147
 gccttggcct cccaaagggc tgggattata ggcgtgacca ccatgtctgg 50
 tccagagtct ctttctctga tgatttatag actcaaagaa aactcatgtt 100
 cagaagctct cttctcttct ggctctctct ctgtcttctt tccctctttc 150
 ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
 tttcattttg cttgtcagtg gggtaggtca ctgagtctta gttttatttt 250
 tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300
 atgagtatat tgcattgatgc tgagggttgg ggt 333

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 148
Met Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
1 5 10 15
Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
20 25 30

Sequence Listing - P3230R1C1.txt

Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
 35 40 45

Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
 50 55 60

Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
 65 70

<210> 149

<211> 1893

<212> DNA

<213> Homo Sapien

<400> 149

gtctccgcgt cacaggaact tcagcaccca cagggcggac agcgctcccc 50
 tctacctgga gacttgactc ccgcgcgccc caaccctgct tatcccttga 100
 ccgtcgagtg tcagagatcc tgcagccgcc cagtcccggc ccctctcccg 150
 cccacaccc accctcctgg ctcttctgt ttttactct ccttttcatt 200
 cataacaaaa gctacagctc caggagccca gcgccgggct gtgaccaag 250
 ccgagcgtgg aagaatgggg ttctcggga ccggcacttg gattctggtg 300
 ttagtgtccc cgattcaagc ttccccaaa cctggaggaa gccaagacaa 350
 atctctacat aatagagaat taagtgcaga aagaccttg aatgaacaga 400
 ttgctgaagc agaagaagac aagattaata aaacatatcc tccagaaaac 450
 aagccaggtc agagcaacta ttcttttgtt gataactga acctgctaaa 500
 ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
 gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600
 aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650
 taaatttcaa gatgatccag atggtcttca tcaactagac gggactcctt 700
 taaccgctga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750
 aatgacagag ccgtgtttga caagattgtt tctaaactac ttaatctcgg 800
 ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850
 ttttacaaaa attaatttca aaggaagcca acaattatga ggaggatccc 900
 aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
 agtgactcca atggcagcaa ttcaagatgg tcttgctaag ggagaaaacg 1000
 atgaaacagt atctaacaca ttaaccttga caaatggctt ggaaaggaga 1050

Sequence Listing - P3230R1C1.txt

actaaaacct acagtgaaga caactttgag gaactccaat atttcccaa 1100
 tttctatgcg ctactgaaaa gtattgattc agaaaaagaa gcaaaagaga 1150
 aagaaacact gattactatc atgaaaacac tgattgactt tgtgaagatg 1200
 atggtgaaat atggaacaat atctccagaa gaaggtgttt cctaccttga 1250
 aaacttggat gaaatgattg ctcttcagac caaaaacaag ctagaaaaaa 1300
 atgctactga caatataagc aagcttttcc cagcaccatc agagaagagt 1350
 catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400
 atatggaagc ttgaaggatt ccacaaaaga tgataactcc aaccaggag 1450
 gaaagacaga tgaacccaaa ggaaaaacag aagcctattt ggaagccatc 1500
 agaaaaaata ttgaatgggt gaagaaacat gacaaaaagg gaaataaaga 1550
 agattatgac ctttcaaga tgagagactt catcaataaa caagctgatg 1600
 cttatgtgga gaaaggcatc cttgacaagg aagaagccga ggccatcaag 1650
 cgcatttata gcagcctgta aaaatggcaa aagatccagg agtctttcaa 1700
 ctgtttcaga aacataata tagcttaaaa cacttctaatt tctgtgatta 1750
 aaatTTTTTg acccaagggt tattagaaag tgctgaattt acagtagtta 1800
 accttttaca agtggttaaa acatagcttt cttcccgtaa aaactatctg 1850
 aaagtaaagt tgtatgtaag ctgaaaaaaa aaaaaaaaaa aaa 1893

<210> 150

<211> 468

<212> PRT

<213> Homo Sapien

<400> 150

Met Gly Phe Leu Gly Thr Gly Thr Trp Ile Leu Val Leu Val Leu
 1 5 10 15

Pro Ile Gln Ala Phe Pro Lys Pro Gly Gly Ser Gln Asp Lys Ser
 20 25 30

Leu His Asn Arg Glu Leu Ser Ala Glu Arg Pro Leu Asn Glu Gln
 35 40 45

Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro
 50 55 60

Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu
 65 70 75

Sequence Listing - P3230R1C1.txt

Asn	Leu	Leu	Lys	Ala	Ile	Thr	Glu	Lys	Glu	Lys	Ile	Glu	Lys	Glu	80	85	90
Arg	Gln	Ser	Ile	Arg	Ser	Ser	Pro	Leu	Asp	Asn	Lys	Leu	Asn	Val	95	100	105
Glu	Asp	Val	Asp	Ser	Thr	Lys	Asn	Arg	Lys	Leu	Ile	Asp	Asp	Tyr	110	115	120
Asp	Ser	Thr	Lys	Ser	Gly	Leu	Asp	His	Lys	Phe	Gln	Asp	Asp	Pro	125	130	135
Asp	Gly	Leu	His	Gln	Leu	Asp	Gly	Thr	Pro	Leu	Thr	Ala	Glu	Asp	140	145	150
Ile	Val	His	Lys	Ile	Ala	Ala	Arg	Ile	Tyr	Glu	Glu	Asn	Asp	Arg	155	160	165
Ala	Val	Phe	Asp	Lys	Ile	Val	Ser	Lys	Leu	Leu	Asn	Leu	Gly	Leu	170	175	180
Ile	Thr	Glu	Ser	Gln	Ala	His	Thr	Leu	Glu	Asp	Glu	Val	Ala	Glu	185	190	195
Val	Leu	Gln	Lys	Leu	Ile	Ser	Lys	Glu	Ala	Asn	Asn	Tyr	Glu	Glu	200	205	210
Asp	Pro	Asn	Lys	Pro	Thr	Ser	Trp	Thr	Glu	Asn	Gln	Ala	Gly	Lys	215	220	225
Ile	Pro	Glu	Lys	Val	Thr	Pro	Met	Ala	Ala	Ile	Gln	Asp	Gly	Leu	230	235	240
Ala	Lys	Gly	Glu	Asn	Asp	Glu	Thr	Val	Ser	Asn	Thr	Leu	Thr	Leu	245	250	255
Thr	Asn	Gly	Leu	Glu	Arg	Arg	Thr	Lys	Thr	Tyr	Ser	Glu	Asp	Asn	260	265	270
Phe	Glu	Glu	Leu	Gln	Tyr	Phe	Pro	Asn	Phe	Tyr	Ala	Leu	Leu	Lys	275	280	285
Ser	Ile	Asp	Ser	Glu	Lys	Glu	Ala	Lys	Glu	Lys	Glu	Thr	Leu	Ile	290	295	300
Thr	Ile	Met	Lys	Thr	Leu	Ile	Asp	Phe	Val	Lys	Met	Met	Val	Lys	305	310	315
Tyr	Gly	Thr	Ile	Ser	Pro	Glu	Glu	Gly	Val	Ser	Tyr	Leu	Glu	Asn	320	325	330
Leu	Asp	Glu	Met	Ile	Ala	Leu	Gln	Thr	Lys	Asn	Lys	Leu	Glu	Lys	335	340	345

Sequence Listing - P3230R1C1.txt

Asn Ala Thr Asp Asn Ile Ser Lys Leu Phe Pro Ala Pro Ser Glu
350 355 360

Lys Ser His Glu Glu Thr Asp Ser Thr Lys Glu Glu Ala Ala Lys
365 370 375

Met Glu Lys Glu Tyr Gly Ser Leu Lys Asp Ser Thr Lys Asp Asp
380 385 390

Asn Ser Asn Pro Gly Gly Lys Thr Asp Glu Pro Lys Gly Lys Thr
395 400 405

Glu Ala Tyr Leu Glu Ala Ile Arg Lys Asn Ile Glu Trp Leu Lys
410 415 420

Lys His Asp Lys Lys Gly Asn Lys Glu Asp Tyr Asp Leu Ser Lys
425 430 435

Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys
440 445 450

Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr
455 460 465

Ser Ser Leu

<210> 151

<211> 2598

<212> DNA

<213> Homo Sapien

<400> 151

cggtcagagg ctccgcccag gagaaaggaa cattctgagg ggagtctaca 50

ccctgtggag ctcaagatgg tcctgagtg ggcgctgtgc ttccgaatga 100

aggactcggc attgaagggtg ctttatctgc ataataacca gctttagct 150

ggagggctgc atgcagggaa ggtcattaaa ggtgaagaga tcagcgtggt 200

ccccaatcgg tggctggatg ccagcctgtc cccgctcatc ctgggtgtcc 250

agggtggaag ccagtgcctg tcatgtgggg tggggcagga gccgactcta 300

acactagagc cagtgaacat catggagctc tatcttggtg ccaaggaatc 350

caagagcttc accttctacc ggcgggacat ggggctcacc tccagcttcg 400

agtcggctgc ctaccgggc tggttcctgt gcacggtgcc tgaagccgat 450

cagcctgtca gactcacca gttcccgag aatggtggct ggaatgcccc 500

catcacagac ttctacttcc agcagtgtga ctagggaac gtgccccca 550

Sequence Listing - P3230R1C1.txt

gaactccctg ggcagagcca gctcgggtga ggggtgagtg gaggagaccc 600
atggcggaca atcactctct ctgctctcag gacccccacg tctgacttag 650
tgggcacctg accactttgt cttctggttc ccagtttga taaattctga 700
gatttgagc tcagtccacg gtcctcccc actggatggt gctactgctg 750
tggaaccttg taaaaacat gtggggtaaa ctgggaataa catgaaaaga 800
tttctgtggg ggtggggtgg gggagtggg ggaatcattc ctgcttaatg 850
gtaactgaca agtgttacct tgagccccgc aggccaaccc atccccagtt 900
gagccttata gggtcagtag ctctccacat gaagtctgt cactcaccac 950
tgtgcaggag agggaggtgg tcatagagtc agggatctat ggccttggc 1000
ccagccccac ccccttcct ttaatctgc cactgtcata tgctacctt 1050
cctatctctt ccctcatcat ctgtgttg gcatgaggag gtggtgatgt 1100
cagaagaaat ggctcgagct cagaagataa aagataagta gggtatgctg 1150
atcctctttt aaaaaccaa gatacaatca aaatcccaga tgctggtctc 1200
tattcccatg aaaaagtgt catgacatat tgagaagacc tacttcaaaa 1250
gtggcatata ttgcaattta ttttaattaa aagataccta tttatatatt 1300
tctttataga aaaaagtctg gaagagtta ctcaattgt agcaatgtca 1350
gggtggtggc agtatagggtg attttcttt taattctgtt aatttatctg 1400
tatttcctaa ttttctaca atgaagatga attccttgta taaaaataag 1450
aaaagaaatt aatcttgagg taagcagagc agacatcatc tctgattgtc 1500
ctcagcctcc acttccccag agtaaattca aattgaatcg agctctgctg 1550
ctctggttgg ttgtagtagt gatcaggaaa cagatctcag caaagccact 1600
gaggaggagg ctgtgctgag tttgtgtggc tggaatctct gggttaaggaa 1650
cttaaagaac aaaaatcatc tggttaattct ttcctagaag gatcacagcc 1700
cctgggattc caaggcattg gatccagtct ctaagaaggc tgctgtactg 1750
gttgaattgt gtccccctca aattcacatc cttcttgga tctcagtctg 1800
tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850
gtcatgctgg atgaaggtag acctaaattc aatatgactg gtttccttgt 1900
atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950

Sequence Listing - P3230R1C1.txt

aagatgaagg cagagatcgg agttttgcag ccacaagcta agaaacacca 2000
aggattgtgg caaccatcag aagcttgga gaggcacaaga agaattcttc 2050
cctagaggct ttagagggat aacggctctg ctgaaacctt aatctcagac 2100
ttccagcctc ctgaacgaag aaagaataaa tttcggctgt ttaagccac 2150
caaggataat tggttacagc agctctagga aactaataca gctgctaaaa 2200
tgatccctgt ctctcgtgt ttacattctg tgtgtgtccc ctcccacaat 2250
gtaccaaagt tgtctttgtg accaatagaa tatggcagaa gtgatggcat 2300
gccacttcca agattagggt ataaaagaca ctgcagcttc tacttgagcc 2350
ctctctctct gccaccacc gcccacaatc tatcttggt cactcgtct 2400
gggggaagct agctgccatg ctatgagcag gcctataaag agacttacgt 2450
ggtaaaaaat gaagtctctt gccacagcc acattagtga acctagaagc 2500
agagactctg tgagataatc gatgtttgtt gttttaagtt gctcagttt 2550
ggtctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala

1 5 10 15

Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly

20 25 30

Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val

35 40 45

Pro Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly

50 55 60

Val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu

65 70 75

Pro Thr Leu Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu

80 85 90

Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met

95 100 105

Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe

Sequence Listing - P3230R1C1.txt

110 115 120

Leu Cys Thr Val Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln
125 130 135

Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro Ile Thr Asp Phe Tyr
140 145 150

Phe Gln Gln Cys Asp
155

<210> 153

<211> 1152

<212> DNA

<213> Homo Sapien

<400> 153

cttcagaaca ggttctcctt cccagtcac cagttgctcg agttagaatt 50
gtctgcaatg gccgccctgc agaaatctgt gagctctttc cttatgggga 100
ccctggccac cagctgcctc cttctcttgg ccctcttggg acagggagga 150
gcagctgcgc ccatacagctc ccactgcagg cttgacaagt ccaacttcca 200
gcagccctat atcaccaacc gcaccttcat gctggctaag gaggctagct 250
tggctgataa caacacagac gttcgtctca ttggggagaa actgttccac 300
ggagtcagta tgagtgcgcg ctgctatctg atgaagcagg tgctgaactt 350
cacccttgaa gaagtgcgtg tccctcaatc tgatagggtc cagccttata 400
tgcaggaggt ggtgcccttc ctggccaggc tcagcaacag gctaagcaca 450
tgtcatattg aaggatga cctgcatatc cagaggaatg tgcaaaagct 500
gaaggacaca gtgaaaaagc ttggagagag tggagagatc aaagcaattg 550
gagaactgga tttgctgttt atgtctctga gaaatgcctg catttgacca 600
gagcaaagct gaaaaatgaa taactaacc ctttcctg ctagaataa 650
caattagatg ccccaaagcg attttttta accaaaagga agatgggaag 700
ccaaactcca tcatgatggg tggattcaa atgaaccct gcgttagtta 750
caaaggaaac caatgccact tttgtttata agaccagaag gtagactttc 800
taagcataga tatttattga taacattca ttgtaactgg tgttctatac 850
acagaaaaca atttattttt taaataattg tcttttcca taaaaaagat 900
tactttccat tccttaggg gaaaaaaccc ctaaataagct tcatgtttcc 950
ataatcagta ctttatattt ataaatgtat ttattattat tataagactg 1000

Sequence Listing - P3230R1C1.txt

cattttattt atatcatttt attaatatgg atttatttat agaaacatca 1050

ttcgatattg ctacttgagt gtaaggctaa tattgatatt tatgacaata 1100

attatagagc tataacatgt ttatttgacc tcaataaaca cttggatatt 1150

cc 1152

<210> 154

<211> 179

<212> PRT

<213> Homo Sapien

<400> 154

Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr
1 5 10 15

Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly
20 25 30

Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser
35 40 45

Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
50 55 60

Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
65 70 75

Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr
80 85 90

Leu Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe
95 100 105

Pro Gln Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro
110 115 120

Phe Leu Ala Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu
125 130 135

Gly Asp Asp Leu His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp
140 145 150

Thr Val Lys Lys Leu Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly
155 160 165

Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn Ala Cys Ile
170 175

<210> 155

<211> 1320

<212> DNA

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 155

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ttccacgagg cctgtcagtc agtgcccgcac ttgtgactga gtgtgcagtg 100
cccagcatgt accaggctcag tgcagagggc tgcctgaggg ctgtgctgag 150
aggagagagga gcagagatgc tgctgagggg ggagggaggg caagctgcca 200
ggtttggggc tgggggcca gtggagtga aaactgggat cccaggggga 250
gggtgcagat gaggagcgca cccagattag gtgaggacag ttctctcatt 300
agccttttcc tacagggtgtg tgcattcttg gcaatggtca tgggaacca 350
cacctacagc cactggccca gctgctgccc cagcaaaggg caggacacct 400
ctgaggagct gctgaggtgg agcactgtgc ctgtgcctcc cctagagcct 450
gctaggccca accgccacc agagtctgt agggccagt aagatggacc 500
cctcaacagc agggccatct cccctggag atatgagttg gacagagact 550
tgaaccggct ccccaggac ctgtaccacg cccgttcct gtgcccgcac 600
tgcgtcagcc tacagacagg ctcccatg gacccccgg gcaactcga 650
gctgctctac cacaaccaga ctgtcttcta caggcgcca tgccatggcg 700
agaagggcac ccacaagggc tactgcctgg agcgcaggct gtaccgtgtt 750
tccttagctt gtgtgtgtgt gcggccccgt gtgatgggt agccggacct 800
gctggaggct ggtcccttt tgggaaacct ggagccagg gtacaaccac 850
ttgccatgaa gggccaggat gccagatgc ttggcccctg tgaagtgtg 900
tctggagcag caggatcccg ggacaggatg gggggctttg gggaaaacct 950
gcacttctgc acattttgaa aagagcagct gctgcttagg gccgccgga 1000
gctggtgtcc tgcattttc ttcaggaaa ggtttcaaa gttctgcca 1050
tttctggagg ccaccactcc tgtctctcc tctttcca tcccctgcta 1100
ccctggccca gcacaggcac ttttagata tttcccctt gctggagaag 1150
aaagagcccc tggttttatt tgtttgtta ctcatcactc agtgagcatc 1200
tactttgggt gcattctagt gtagtacta gtctttgac atggatgatt 1250
ctgaggagga agctgttatt gaatgtatag agatttatcc aaataaatat 1300
ctttatttaa aaatgaaaa 1320

Sequence Listing - P3230R1C1.txt

<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met Arg Glu Arg Pro Arg Leu Gly Glu Asp Ser Ser Leu Ile Ser
1 5 10 15

Leu Phe Leu Gln Val Val Ala Phe Leu Ala Met Val Met Gly Thr
20 25 30

His Thr Tyr Ser His Trp Pro Ser Cys Cys Pro Ser Lys Gly Gln
35 40 45

Asp Thr Ser Glu Glu Leu Leu Arg Trp Ser Thr Val Pro Val Pro
50 55 60

Pro Leu Glu Pro Ala Arg Pro Asn Arg His Pro Glu Ser Cys Arg
65 70 75

Ala Ser Glu Asp Gly Pro Leu Asn Ser Arg Ala Ile Ser Pro Trp
80 85 90

Arg Tyr Glu Leu Asp Arg Asp Leu Asn Arg Leu Pro Gln Asp Leu
95 100 105

Tyr His Ala Arg Cys Leu Cys Pro His Cys Val Ser Leu Gln Thr
110 115 120

Gly Ser His Met Asp Pro Arg Gly Asn Ser Glu Leu Leu Tyr His
125 130 135

Asn Gln Thr Val Phe Tyr Arg Arg Pro Cys His Gly Glu Lys Gly
140 145 150

Thr His Lys Gly Tyr Cys Leu Glu Arg Arg Leu Tyr Arg Val Ser
155 160 165

Leu Ala Cys Val Cys Val Arg Pro Arg Val Met Gly
170 175

<210> 157

<211> 1515

<212> DNA

<213> Homo Sapien

<400> 157

ccggcgatgt cgctcgtgct gctaagcctg gccgcgctgt gcaggagcgc 50

cgtaccccga gagccgaccg ttcaatgtgg ctctgaaact gggccatctc 100

cagagtggat gctacaacat gatctaattcc ccggagactt gagggacctc 150

Sequence Listing - P3230R1C1.txt

cgagtagaac ctgttacaac tagtgttgca acaggggact attcaatttt 200
gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
aggccaccaa gatttgtgtg acggggcaaaa gcaactcca gtcctacagc 300
tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
tggtggtaaa tggacatttt cctacatcgg ctccctgta gagctgaaca 400
cagtctattt cattggggcc cataatattc ctaatgcaaa tatgaatgaa 450
gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggatac 550
cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
tatcatcggg ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacggtg 750
cagctgactc catattttcc tacttgggc agcgactgca tccgacataa 800
aggaacagtt gtgctctgcc cacaacagg cgtcccttc cctctggata 850
acaacaaaag caagccggga ggctggctgc ctctctcct gctgtctctg 900
ctgggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
cgaaaggatc aagaagactt cttttctac caccacacta ctgccccca 1000
ttaaggttct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050
tggtacttca ctgaatttct tcaaaacat tgcagaagtg aggtcatcct 1100
tgaaaagtgg cagaaaaaga aaatagcaga gatgggtcca gtgcagtggc 1150
ttgccactca aaagaaggca gcagacaaag tcgtcttct tctttcaat 1200
gacgtcaaca gtgtgtgcga tggtagctgt ggcaagagcg agggcagtcc 1250
cagtgagaac tctcaagacc tctccccct tgcctttaac cttttctgca 1300
gtgatctaag aagccagatt catctgcaca aatacgtggg ggtctacttt 1350
agagagattg atacaaaaga cgattacaat gctctcagtg tctgccccaa 1400
gtaccacctc atgaaggatg ccactgcttt ctgtgcagaa ctttccatg 1450
tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
tgctgctcct tgtag 1515

Sequence Listing - P3230R1C1.txt

<210> 158

<211> 502

<212> PRT

<213> Homo Sapien

<400> 158

Met Ser Leu Val Leu Leu Ser Leu Ala Ala Leu Cys Arg Ser Ala
1 5 10 15

Val Pro Arg Glu Pro Thr Val Gln Cys Gly Ser Glu Thr Gly Pro
20 25 30

Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu
35 40 45

Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly
50 55 60

Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp
65 70 75

Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly
80 85 90

Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr
95 100 105

Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Trp Thr
110 115 120

Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe
125 130 135

Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly
140 145 150

Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His
155 160 165

Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala Gly Ser Leu Trp
170 175 180

Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu Thr Val Glu
185 190 195

Val Asn Phe Thr Thr Thr Pro Leu Gly Asn Arg Tyr Met Ala Leu
200 205 210

Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu Pro
215 220 225

His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr
230 235 240

Sequence Listing - P3230R1C1.txt

Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro
 245 250 255
 Thr Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu
 260 265 270
 Cys Pro Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser
 275 280 285
 Lys Pro Gly Gly Trp Leu Pro Leu Leu Leu Leu Ser Leu Leu Val
 290 295 300
 Ala Thr Trp Val Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His
 305 310 315
 Glu Arg Ile Lys Lys Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro
 320 325 330
 Pro Ile Lys Val Leu Val Val Tyr Pro Ser Glu Ile Cys Phe His
 335 340 345
 His Thr Ile Cys Tyr Phe Thr Glu Phe Leu Gln Asn His Cys Arg
 350 355 360
 Ser Glu Val Ile Leu Glu Lys Trp Gln Lys Lys Lys Ile Ala Glu
 365 370 375
 Met Gly Pro Val Gln Trp Leu Ala Thr Gln Lys Lys Ala Ala Asp
 380 385 390
 Lys Val Val Phe Leu Leu Ser Asn Asp Val Asn Ser Val Cys Asp
 395 400 405
 Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser Glu Asn Ser Gln
 410 415 420
 Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser Asp Leu Arg
 425 430 435
 Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe Arg Glu
 440 445 450
 Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro Lys
 455 460 465
 Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu
 470 475 480
 His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys
 485 490 495
 His Asp Gly Cys Cys Ser Leu
 500

<210> 159

Sequence Listing - P3230R1C1.txt

<211> 535
<212> DNA
<213> Homo Sapien

<400> 159
agccaccagc gcaacatgac agtgaagacc ctgcatggcc cagccatggt 50
caagtacttg ctgctgtcga tattggggct tgcctttctg agtgaggcgg 100
cagctcggaa aatcccaaaa gtaggacata cttttttcca aaagcctgag 150
agttgcccgc ctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200
caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250
cctccccctg gaattacact gtcacttggg accccaaccg gtaccctcgc 300
gaagttgtac aggcccatg taggaacttg ggctgcatca atgctcaagg 350
aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400
tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450
gtgctggtga ctgttggtg cacctgcgtc acccctgtca tccaccatgt 500
gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160
<211> 163
<212> PRT
<213> Homo Sapien

<400> 160
Met Thr Val Lys Thr Leu His Gly Pro Ala Met Val Lys Tyr Leu
1 5 10 15
Leu Leu Ser Ile Leu Gly Leu Ala Phe Leu Ser Glu Ala Ala Ala
20 25 30
Arg Lys Ile Pro Lys Val Gly His Thr Phe Phe Gln Lys Pro Glu
35 40 45
Ser Cys Pro Pro Val Pro Gly Gly Ser Met Lys Leu Asp Ile Gly
50 55 60
Ile Ile Asn Glu Asn Gln Arg Val Ser Met Ser Arg Asn Ile Glu
65 70 75
Ser Arg Ser Thr Ser Pro Trp Asn Tyr Thr Val Thr Trp Asp Pro
80 85 90
Asn Arg Tyr Pro Ser Glu Val Val Gln Ala Gln Cys Arg Asn Leu
95 100 105
Gly Cys Ile Asn Ala Gln Gly Lys Glu Asp Ile Ser Met Asn Ser

Sequence Listing - P3230R1C1.txt

110 115 120

Val Pro Ile Gln Gln Glu Thr Leu Val Val Arg Arg Lys His Gln
125 130 135

Gly Cys Ser Val Ser Phe Gln Leu Glu Lys Val Leu Val Thr Val
140 145 150

Gly Cys Thr Cys Val Thr Pro Val Ile His His Val Gln
155 160

<210> 161

<211> 2380

<212> DNA

<213> Homo Sapien

<400> 161

acactggcca aacaaaaacg aaagcactcc gtgctggaag taggaggaga 50

gtcaggactc ccaggacaga gagtgcacaa actaccagc acagccccct 100

ccgccccctc tggaggctga agagggattc cagccccctgc caccacaga 150

cacgggctga ctgggggtgc tgccccctt gggggggggc agcacagggc 200

ctcaggcctg ggtgccact ggcacctaga agatgcctgt gccctggttc 250

ttgctgtcct tggcactggg ccgaagccca gtggctctt ctctggagag 300

gcttggtggg cctcaggacg ctaccactg ctctccgggc ctctctgcc 350

gcctctggga cagtacata ctctgcctgc ctggggacat cgtgcctgct 400

ccgggccccg tgtggcgcc tacgcactg cagacagagc tgggtgctgag 450

gtgccagaag gagaccgact gtgaccttg tctgcgtgtg gctgtccact 500

tggccgtgca tgggcactgg gaagagcctg aagatgagga aaagtttga 550

ggagcagctg actcaggggt ggaggagcct aggaatgcct ctctccaggc 600

ccaagtcgtg ctctcttcc aggcctacc tactgcccgc tgcgtcctgc 650

tggaggtgca agtgctgct gcccttgctc agtttggtca gtctgtgggc 700

tctgtggtat atgactgctt cgaggctgcc ctagggagtg aggtacgaat 750

ctggctctat actcagccca ggtacgagaa ggaactcaac cacacacagc 800

agctgcctgc cctgccctgg ctcaacgtgt cagcagatgg tgacaacgtg 850

catctgggtc tgaatgtctc tgaggagcag cacttcggcc tctccctgta 900

ctggaatcag gtccagggcc ccccaaaacc ccggtggcac aaaaacctga 950

ctggaccgca gatcattacc ttgaaccaca cagacctggt tcctgcctc 1000

Sequence Listing - P3230R1C1.txt

tgtattcagg tgtggcctct ggaacctgac tccgttagga cgaacatctg 1050
ccccctcagg gaggaccccc gcgcacacca gaacctctgg caagccgccc 1100
gactgcgact gctgacctg cagagctggc tgctggacgc accgtgctcg 1150
ctgcccgcag aagcggcact gtgctggcgg gctccgggtg gggaccctg 1200
ccagccactg gtcccaccgc ttctctggga gaacgtcact gtggacaagg 1250
ttctcgagtt ccattgctg aaaggccacc ctaacctctg tgttcaggtg 1300
aacagctcgg agaagctgca gctgcaggag tgcttggtgg ctgactccct 1350
ggggcctctc aaagacgatg tgctactgtt ggagacacga ggcccccagg 1400
acaacagatc cctctgtgcc ttggaacca gtggctgtac ttcactaccc 1450
agcaaagcct ccacgagggc agctcgcctt ggagagtact tactacaaga 1500
cctgcagtca ggccagtgtc tgcagctatg ggacgatgac ttgggagcgc 1550
tatgggcctg ccccatggac aaatacatcc acaagcgtg ggccctcgtg 1600
tggtggcct gcctactctt tgccgctgcg cttccctca tctccttct 1650
caaaaaggat cacgcgaaag ggtggctgag gctctgaaa caggacgtcc 1700
gctcgggggc ggccgccagg ggccgcgcgg ctctgctcct ctactcagcc 1750
gatgactcgg gtttcgagcg cctggtgggc gccctggcgt cggccctgtg 1800
ccagctgccg ctgcgcgtgg ccgtagacct gtggagccgt cgtgaactga 1850
gcgcgcaggg gcccgtggct tggtttcacg cgcagcggcg ccagaccctg 1900
caggagggcg gcgtggtggt ctgctcttc tctccggtg cggtggcgct 1950
gtgcagcgag tggctacagg atggggtgtc cgggcccggg gcgcacggcc 2000
cgcacgacgc ctccgcgcc tcgctcagct gcgtgctgcc cgacttcttg 2050
cagggccggg cgcccgag ctacgtgggg gcctgcttcg acaggctgct 2100
ccaccggac gccgtaccg ccttttccg caccgtgcc gtcttcacac 2150
tgccctcca actgccagac ttctggggg ccctgcagca gcctcgcgcc 2200
ccgcgttccg ggcggctcca agagagagcg gagcaagtgt cccgggccct 2250
tcagccagcc ctggatagct acttccatcc cccggggact cccgcgccg 2300
gacgcggggt gggaccaggg gcgggacctg gggcggggga cgggacttaa 2350

Sequence Listing - P3230R1C1.txt

ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser

1 5 10 15

Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala

20 25 30

Thr His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp

35 40 45

Ile Leu Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val

50 55 60

Leu Ala Pro Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln

65 70 75

Lys Glu Thr Asp Cys Asp Leu Cys Leu Arg Val Ala Val His Leu

80 85 90

Ala Val His Gly His Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe

95 100 105

Gly Gly Ala Ala Asp Ser Gly Val Glu Glu Pro Arg Asn Ala Ser

110 115 120

Leu Gln Ala Gln Val Val Leu Ser Phe Gln Ala Tyr Pro Thr Ala

125 130 135

Arg Cys Val Leu Leu Glu Val Gln Val Pro Ala Ala Leu Val Gln

140 145 150

Phe Gly Gln Ser Val Gly Ser Val Val Tyr Asp Cys Phe Glu Ala

155 160 165

Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr Thr Gln Pro Arg

170 175 180

Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro Ala Leu Pro

185 190 195

Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu Val Leu

200 205 210

Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp Asn

215 220 225

Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Thr

230 235 240

Sequence Listing - P3230R1C1.txt

Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys
 245 250 255
 Leu Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr
 260 265 270
 Asn Ile Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln Asn Leu
 275 280 285
 Trp Gln Ala Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu
 290 295 300
 Leu Asp Ala Pro Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp
 305 310 315
 Arg Ala Pro Gly Gly Asp Pro Cys Gln Pro Leu Val Pro Pro Leu
 320 325 330
 Ser Trp Glu Asn Val Thr Val Asp Lys Val Leu Glu Phe Pro Leu
 335 340 345
 Leu Lys Gly His Pro Asn Leu Cys Val Gln Val Asn Ser Ser Glu
 350 355 360
 Lys Leu Gln Leu Gln Glu Cys Leu Trp Ala Asp Ser Leu Gly Pro
 365 370 375
 Leu Lys Asp Asp Val Leu Leu Leu Glu Thr Arg Gly Pro Gln Asp
 380 385 390
 Asn Arg Ser Leu Cys Ala Leu Glu Pro Ser Gly Cys Thr Ser Leu
 395 400 405
 Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu Gly Glu Tyr Leu
 410 415 420
 Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu Trp Asp Asp
 425 430 435
 Asp Leu Gly Ala Leu Trp Ala Cys Pro Met Asp Lys Tyr Ile His
 440 445 450
 Lys Arg Trp Ala Leu Val Trp Leu Ala Cys Leu Leu Phe Ala Ala
 455 460 465
 Ala Leu Ser Leu Ile Leu Leu Leu Lys Lys Asp His Ala Lys Gly
 470 475 480
 Trp Leu Arg Leu Leu Lys Gln Asp Val Arg Ser Gly Ala Ala Ala
 485 490 495
 Arg Gly Arg Ala Ala Leu Leu Leu Tyr Ser Ala Asp Asp Ser Gly
 500 505 510

Sequence Listing - P3230R1C1.txt

Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys Gln Leu
515 520 525

Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser
530 535 540

Ala Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr
545 550 555

Leu Gln Glu Gly Gly Val Val Val Leu Leu Phe Ser Pro Gly Ala
560 565 570

Val Ala Leu Cys Ser Glu Trp Leu Gln Asp Gly Val Ser Gly Pro
575 580 585

Gly Ala His Gly Pro His Asp Ala Phe Arg Ala Ser Leu Ser Cys
590 595 600

Val Leu Pro Asp Phe Leu Gln Gly Arg Ala Pro Gly Ser Tyr Val
605 610 615

Gly Ala Cys Phe Asp Arg Leu Leu His Pro Asp Ala Val Pro Ala
620 625 630

Leu Phe Arg Thr Val Pro Val Phe Thr Leu Pro Ser Gln Leu Pro
635 640 645

Asp Phe Leu Gly Ala Leu Gln Gln Pro Arg Ala Pro Arg Ser Gly
650 655 660

Arg Leu Gln Glu Arg Ala Glu Gln Val Ser Arg Ala Leu Gln Pro
665 670 675

Ala Leu Asp Ser Tyr Phe His Pro Pro Gly Thr Pro Ala Pro Gly
680 685 690

Arg Gly Val Gly Pro Gly Ala Gly Pro Gly Ala Gly Asp Gly Thr
695 700 705

<210> 163

<211> 2478

<212> DNA

<213> Homo Sapien

<400> 163

gtcagtgcgg gaggccggtc agccaccaag atgactgaca gggtcagctc 50

tctgcagcac actaccctca agccacctga tgtgacctgt atctccaaag 100

tgagatcgat tcagatgatt gttcatccta cccccacgcc aatccgtgca 150

ggcgtaggcc accggctaac cctggaagac atcttcatg acctgttcta 200

ccacttagag ctccagggtca accgcacctta ccaaatgcac cttggaggga 250

Sequence Listing - P3230R1C1.txt

agcagagaga atatgagttc ttcggcctga cccctgacac agagttcctt 300
ggcaccatca tgatttgcgt tcccacctgg gccaaaggaga gtgcccccta 350
catgtgccga gtgaagacac tgccagaccg gacatggacc tactccttct 400
ccggagcctt cctgttctcc atgggcttcc tcgtcgagcgt actctgctac 450
ctgagctaca gatatgtcac caagccgcct gcacctccca actccctgaa 500
cgtccagcga gtcttgactt tccagccgct gcgcttcac caggagcacg 550
tcctgatccc tgtcttgac ctacgcggcc ccagcagctt ggcccagcct 600
gtccagtact cccagatcag ggtgtctgga cccagggagc ccgcaggagc 650
tccacagcgg catagcctgt ccgagatcac ctacttaggg cagccagaca 700
tctccatcct ccagccctcc aacgtgccac ctccccagat cctctcccca 750
ctgtcctatg ccccaaacgc tgcccctgag gtcggggccc catcctatgc 800
acctcaggtg acccccgaag ctcaattccc attctacgcc ccacaggcca 850
tctctaaggt ccagccttcc tcctatgccc ctcaagccac tccggacagc 900
tggcctccct cctatgggggt atgcatggaa ggttctggca aagactcccc 950
cactgggaca ctttctagtc ctaaacacct taggcctaaa ggtcagcttc 1000
agaaagagcc accagctgga agctgcatgt taggtggcct ttctctgcag 1050
gaggtgacct ccttggctat ggaggaatcc caagaagcaa aatcattgca 1100
ccagcccctg gggatttga cagacagaac atctgacca aatgtgctac 1150
acagtgggga ggaagggaca ccacagtacc taaagggcca gctccccctc 1200
ctctcctcag tccagatcga gggccacccc atgtccctcc ctttgcaacc 1250
tccttccggt ccatgttccc cctcggaaca aggtccaagt ccctggggcc 1300
tgctggagtc cttgtgtgt cccaaggatg aagccaagag cccagcccct 1350
gagacctcag acctggagca gcccacagaa ctggattctc ttttcagagg 1400
cctggccctg actgtgcagt gggagtcctg aggggaatgg gaaaggcttg 1450
gtgcttcctc cctgtcccta cccagtgtca catccttggc tgtcaatccc 1500
atgcctgccc atgccacaca ctctgcgac tggcctcaga cgggtgccct 1550
tgagagaagc agagggagtg gcatgcaggg cccctgccat ggggtgcgctc 1600
ctcaccggaa caaagcagca tgataaggac tgcagcgggg gagctctggg 1650

Sequence Listing - P3230R1C1.txt

gagcagcttg ttagacaag cgcgtgctcg ctgagccctg caaggcagaa 1700
atgacagtgc aaggaggaaa tgcagggaaa ctcccagagt ccagagcccc 1750
acctcctaac accatggatt caaagtgtc aggaatttg cctctccttg 1800
ccccattcct ggccagtttc acaatctagc tcgacagagc atgaggcccc 1850
tgcctcttct gtcattgttc aaaggtggga agagagcctg gaaaagaacc 1900
aggcctggaa aagaaccaga aggaggctgg gcagaaccag aacaacctgc 1950
acttctgcca aggccagggc cagcaggacg gcaggactct agggaggggt 2000
gtggcctgca gctcattccc agccagggca actgcctgac gttgcacgat 2050
ttcagcttca ttcctctgat agaacaaagc gaaatgcagg tccaccaggg 2100
agggagacac acaagccttt tctgcaggca ggagtttcag accctatcct 2150
gagaatgggg ttgaaagga aggtgagggc tgtggcccct ggacgggtac 2200
aataacacac tgtactgatg tcacaacttt gcaagctctg ccttgggttc 2250
agcccatctg ggctcaaatt ccagcctcac cactacaag ctgtgtgact 2300
tcaaacaat gaaatcagt cccagaacct cggttctc atctgtaatg 2350
tggggatcat aacacctacc tcatggagtt gtggtgaaga tgaaatgaag 2400
tcatgtcttt aaagtgtta atagtgcctg gtacatgggc agtgcccaat 2450
aaacggtagc tatttaaaaa aaaaaaaa 2478

<210> 164

<211> 574

<212> PRT

<213> Homo Sapien

<400> 164

Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala

1 5 10 15

His Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe

20 25 30

Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro

35 40 45

Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr

50 55 60

Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr

65 70 75

Sequence Listing - P3230R1C1.txt

Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu		
80	85	90
Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser		
95	100	105
Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr		
110	115	120
Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile		
125	130	135
Gln Met Ile Val His Pro Thr Pro Thr Pro Ile Arg Ala Gly Asp		
140	145	150
Gly His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr		
155	160	165
His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly		
170	175	180
Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr		
185	190	195
Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp Ala Lys		
200	205	210
Glu Ser Ala Pro Tyr Met Cys Arg Val Lys Thr Leu Pro Asp Arg		
215	220	225
Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly		
230	235	240
Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr		
245	250	255
Lys Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu		
260	265	270
Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro		
275	280	285
Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln		
290	295	300
Tyr Ser Gln Ile Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Ala		
305	310	315
Pro Gln Arg His Ser Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro		
320	325	330
Asp Ile Ser Ile Leu Gln Pro Ser Asn Val Pro Pro Pro Gln Ile		
335	340	345
Leu Ser Pro Leu Ser Tyr Ala Pro Asn Ala Ala Pro Glu Val Gly		

Sequence Listing - P3230R1C1.txt

350	355	360
Pro Pro Ser Tyr Ala Pro Gln Val Thr Pro Glu Ala Gln Phe Pro		
365	370	375
Phe Tyr Ala Pro Gln Ala Ile Ser Lys Val Gln Pro Ser Ser Tyr		
380	385	390
Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro Pro Ser Tyr Gly Val		
395	400	405
Cys Met Glu Gly Ser Gly Lys Asp Ser Pro Thr Gly Thr Leu Ser		
410	415	420
Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro		
425	430	435
Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val		
440	445	450
Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His		
455	460	465
Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val		
470	475	480
Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln		
485	490	495
Leu Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser		
500	505	510
Leu Pro Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln		
515	520	525
Gly Pro Ser Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys		
530	535	540
Asp Glu Ala Lys Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln		
545	550	555
Pro Thr Glu Leu Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val		
560	565	570
Gln Trp Glu Ser		

<210> 165

<211> 1060

<212> DNA

<213> Homo Sapien

<400> 165

tggcctactg gaaaaaaaaa aaaaaaaaaa aaaagtcacc cgggccccgcg 50

Sequence Listing - P3230R1C1.txt

gtggccacaa catggctgcg gcgccggggc tgctcttctg gctgttcgtg 100
ctggggggcgc tctggtgggt cccggggccag tcggatctca gccacggacg 150
gcgtttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
ttccaaaaga ttgatcaag gtacttcata aatacacgga agaagagcta 400
catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct ttaggatctt ttggaactgg 500
aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600
tgagcccagag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
cctcacacca gcggtcctgc ggctaacgct cagggagtgc agtcttcgtt 750
ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800
aaagcagaac tggcaatagt tctcctgcct cggtggagcg ggagaagaca 850
gatgcttaca aagtctgaa aacagaaatg agtcagagag gaagtggaca 900
gtgcgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000
tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050
aaaaaaaaaa 1060

<210> 166
<211> 303
<212> PRT
<213> Homo Sapien

<400> 166
Met Ala Ala Ala Pro Gly Leu Leu Phe Trp Leu Phe Val Leu Gly
1 5 10 15
Ala Leu Trp Trp Val Pro Gly Gln Ser Asp Leu Ser His Gly Arg
20 25 30
Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met
35 40 45

Sequence Listing - P3230R1C1.txt

Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp
 50 55 60
 Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Asp Val Tyr Val Tyr
 65 70 75
 Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val
 80 85 90
 Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu
 95 100 105
 His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr
 110 115 120
 Asp Phe Val Cys Phe Glu Gly Gly Arg Asp Asp Phe Asn Ser Tyr
 125 130 135
 Asn Val Glu Glu Leu Leu Gly Ser Leu Glu Leu Glu Asp Ser Val
 140 145 150
 Pro Glu Glu Ser Lys Lys Ala Glu Glu Val Ser Gln His Arg Glu
 155 160 165
 Lys Ser Pro Glu Glu Ser Arg Gly Arg Glu Leu Asp Pro Val Pro
 170 175 180
 Glu Pro Glu Ala Phe Arg Ala Asp Ser Glu Asp Gly Glu Gly Ala
 185 190 195
 Phe Ser Glu Ser Thr Glu Gly Leu Gln Gly Gln Pro Ser Ala Gln
 200 205 210
 Glu Ser His Pro His Thr Ser Gly Pro Ala Ala Asn Ala Gln Gly
 215 220 225
 Val Gln Ser Ser Leu Asp Thr Phe Glu Glu Ile Leu His Asp Lys
 230 235 240
 Leu Lys Val Pro Gly Ser Glu Ser Arg Thr Gly Asn Ser Ser Pro
 245 250 255
 Ala Ser Val Glu Arg Glu Lys Thr Asp Ala Tyr Lys Val Leu Lys
 260 265 270
 Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr
 275 280 285
 Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys
 290 295 300
 Asp Cys Phe

Sequence Listing - P3230R1C1.txt

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

ccaggaccag ggcgcaccgg ctcagcctct cacttgtcag aggccgggga 50
agagaagcaa agcgcaacgg tgtggtccaa gccgggggctt ctgcttcgcc 100
tctaggacat acacgggacc ccctaacttc agtcccccaa acgcgcaccc 150
tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcg 200
caggcggcag gtcccggccg aaggcgatgc gcgcaggggg tcgggcagct 250
gggctcgggc ggcgggagta gggcccggca gggaggcagg gaggctgcat 300
attcagagtc gcgggctgcg ccctgggcag aggccgccct cgctccacgc 350
aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgctgct 400
gctgggcgcc gcgctgctct gcggccacgg agccttctgc cgccgcgtgg 450
tcagcggcca aaaggtgtgt ttgctgact tcaagcatcc ctgctacaaa 500
atggcctact tccatgaact gtccagccga gtgagcttcc aggaggcacg 550
cctggcttgt gagagtgagg gaggagtctt cctcagcctt gagaatgaag 600
cagaacagaa gttaatagag agcatgttgc aaaacctgac aaaacccggg 650
acagggattt ctgatggtga ttcttgata gggctttgga ggaatggaga 700
tgggcaaaca tctggtgcct gccagatct ctaccagtgg tctgatggaa 750
gcaattccca gtaccgaaac tggtagacag atgaaccttc ctgcggaagt 800
gaaaagtgtg ttgtgatgta tcaccaacca actgccaatc ctggccttgg 850
gggtccctac cttaccagt ggaatgatga cagggtgaac atgaagcaca 900
attatatttg caagtatgaa ccagagatta atccaacagc ccctgtagaa 950
aagccttacc ttacaaatca accaggagac acccatcaga atgtggttgt 1000
tactgaagca ggtataattc ccaatctaatt tatgttggt ataccaacaa 1050
taccctgct cttactgata ctggttgctt ttggaacctg ttgtttccag 1100
atgctgcata aaagtaaagg aagaacaaaa actagtccaa accagtctac 1150
actgtggatt tcaaagagta ccagaaaaga aagtggcatg gaagtataat 1200
aactcattga ctgggtcca gaattttgta attctggatc tgtataagga 1250

Sequence Listing - P3230R1C1.txt

atggcatcag aacaatagct tggaatggct tgaaatcaca aaggatctgc 1300
aagatgaact gtaagctccc ccttgaggca aatattaaag taatttttat 1350
atgtctatta tttcatttaa agaatatgct gtgctaataa tggagtgaga 1400
catgcttatt ttgctaaagg atgcacccaa acttcaaact tcaagcaaatt 1450
gaaatggaca atgcagataa agttgttatc aacacgtcgg gagtatgtgt 1500
gttagaagca attcctttta tttctttcac ctttcataag ttgttatcta 1550
gtcaatgtaa tgtatattgt attgaaattt acagtgtgca aaagtatttt 1600
acctttgcat aagtgtttga taaaaatgaa ctgttctaatt atttattttt 1650
atggcatctc atttttcaat acatgctctt ttgattaaag aaacttatta 1700
ctgttgtaa ctgaattcac acacacacaa atatagtacc atagaaaaag 1750
tttgttttct cgaaataatt catctttcag cttctctgct ttgggtcaat 1800
gtctaggaaa tctcttcaga aataagaagc tatttcatta agtgtgatat 1850
aaacctctc aaacatttta ctagaggca aggattgtct aatttcaatt 1900
gtgcaagaca tgtgccttat aattattttt agcttaaaat taaacagatt 1950
ttgtaataat gtaactttgt taataggtgc ataaacacta atgcagtcaa 2000
tttgaacaaa agaagtgaca tacacaatat aaatcatatg tcttcacacg 2050
ttgcctatat aatgagaagc agctctctga gggttctgaa atcaatgtgg 2100
tcctctctt gccactaaa caaagatggg ttgtcggggg ttgggattga 2150
cactggaggc agatagttgc aaagttagtc taaggtttcc ctgctgtat 2200
ttagcctctg actatattag tatacaaaga ggcatgtgg ttgagaccag 2250
gtgaatagtc actatcagtg tggagacaag cacagcacac agacatttta 2300
ggaaggaaaag gaactacgaa atcgtgtgaa aatgggttgg aacctatcag 2350
tgatcgcata ttcattgatg agggtttgct tgagatagaa aatgggtggct 2400
cctttctgtc ttatctccta gtttcttcaa tgcttacgcc ttgttcttct 2450
caagagaaaag ttgtaactct ctggtcttca tatgtccctg tgctcctttt 2500
aaccataata agagttcttg tttctggggg aaaaaaaaaa aaaaaaaaaa 2550
aaaaaaaaaa aaaaaaaaaa 2570

<210> 168

Sequence Listing - P3230R1C1.txt

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

Met Ser Arg Val Val Ser Leu Leu Leu Gly Ala Ala Leu Leu Cys
1 5 10 15

Gly His Gly Ala Phe Cys Arg Arg Val Val Ser Gly Gln Lys Val
20 25 30

Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe
35 40 45

His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala
50 55 60

Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala
65 70 75

Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro
80 85 90

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg
95 100 105

Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln
110 115 120

Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp
125 130 135

Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln
140 145 150

Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp
155 160 165

Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr
170 175 180

Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu
185 190 195

Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu
200 205 210

Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile
215 220 225

Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe
230 235 240

Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn
245 250 255

Sequence Listing - P3230R1C1.txt

Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly
260 265 270

Met Glu Val

<210> 169

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 169

tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 170

caggaaacag ctatgaccac ctgcacacct gcaaaccat t 41

100

1